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ABSTRACT

This report examines the feasibility of collecting social indicator data on the: (1) status of women and minorities in education; (2) federal role in elementary and secondary education; and (3) condition of professional education. Previous projects conducted literature reviews and developed conceptual frameworks for these three topics, identifying dependent and independent variables. This report summarizes the availability and quality of data sources; lists research questions that can be addressed; and recommends ways to analyze, display, and disseminate data. About two-thirds of this document consists of bibliographic citations and descriptions of data which provide information on the topics. In addition, specific data collection strategies which might be used by the National Center for Education Statistics (NCES) to collect currently unavailable data are suggested. It was concluded that sufficient data are available on the status of women and minorities in education. The data are disaggregatable by sex more often than by race, and therefore, the quality of data on the status of minorities is poorer than the quality of the data on the status of women. The report concludes that an overall perspective on changes occurring in professional education is needed: comparisons among professions should be made, and the effects of developments in one professional field on another need to be examined. (GDC)

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Technical Report No. 7

Feasibility of Social Indicator Reports in Three Content Areas

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STATISTICAL ANALYSIS GROUP IN EDUCATION

For the

National Center for Education Statistics

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TECHNICAL REPORT #7

FEASIBILITY OF SOCIAL INDICATOR REPORTS IN THREE CONTENT AREAS

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September 1979

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INTRODUCTION AND OVERVIEW

The purpose of this report is to serve as the second step toward developing and issuing social indicator reports on three topics: (1) the status of women and minorities in education, (2) the federal role in elementary and secondary education, and (3) the condition of professional education. In the first step, SAGE performed literature reviews and developed conceptual frameworks in these three content areas (Gilmartin, 1978; Rossi, 1978; McBain, 1979). The conceptual frameworks (displayed as figures in the previous reports) identified key dependent and independent variables and their interrelationships for each content area. While measurement of the dependent variables is of primary concern, many of the independent variables, or influencing factors, could be subject to policy manipulation and therefore their measurement and inclusion in a social indicator report is equally important. Other influencing factors identified in the conceptual frameworks that are not subject to policy manipulation would nevertheless have to be taken into account in analyses of the social indicator data.

This feasibility report builds on the content of the earlier literature reviews. It summarizes the availability and the quality of data sources for the variables identified in the conceptual frameworks, lists research questions that can be addressed with these data, and recommends in what form the data should be analyzed, displayed, and disseminated. Research questions that are of sufficient importance and for which the required data are available could form the basis for social indicator reports in the three areas to be developed and published during the next year.

This report is divided into (1) sections specific to each of the content areas, followed by (2) sections that describe data collection strategies for various information needs, review the data search procedures, and cite the sources of all the data that were located and accessed. In each of the three content-specific sections, we have

included figures that correspond approximately to the conceptual frameworks submitted earlier. Each figure focuses on a single class of dependent variables (in the center), surrounded by independent variables, or influencing factors, that were suggested by the literature reviews. For each variable, the figures display whether appropriate data were located and, if so, the periodicity and length of the best time series available. A solid line indicates that a time series was located that has been measured annually for the past 20 years or more. A dashed line indicates that a time series was located, but either it has not been updated annually (although it may extend for more than 20 years) or it is not 20 years long (although it may be annual). A series of dots indicates that the data source consisted of a one-time measurement. Whenever we found no acceptable data for a variable, we left the corresponding entry in a box empty.

All of the relevant data that we found for the variables presented in the conceptual frameworks are described and cited in the last section of this report, "Data Sources." For most of the variables, we found several independent sources, which usually differed in their operational definitions of the variable. These sources may also differ with respect to the level of detail associated with measurement of the variable, the types of disaggregations that are possible, and the years covered by the time series. Virtually all of these data have already been accessed* except the most recent updates in some of the annual series.

For the variables that we have not been able to measure adequately using existing data, we have suggested specific data collection strategies that could be used to gather the required data as part of ongoing

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*The data needed for macrolevel time-series analyses and for social indicator reports are not computer files of individual-level records but rather the summary tables resulting from analyses of such files over all the years of periodic data collection. These summary tables have been added to the SAGE library as a part of the accessing step.

NCES monitoring efforts. There are undoubtedly many less prominent existing data sources that could be used to fill in the gaps, and we would very much welcome information about them.

Sufficient data are available for several social indicator reports on the status of women and minorities in education. The data are disaggregatable by sex more often than by race, and consequently the quality of data on the status of minorities in education is poorer than the quality of data on the status of women. The status of women and of educationally disadvantaged ethnic minorities should be presented in separate series of social indicator reports. The problems each of these groups faces, the educational stages at which these problems occur, and the factors related to them are quite different.

Because the area of the federal role in elementary and secondary education is so closely related to the contents and purposes of present statistical compendia and chartbooks issued by NCES, it does not seem desirable to create a new publication or publication series in this area. Our recommended strategy is to include a chapter on the federal role in elementary and secondary education in The Condition of Education.

Several statistical reports and chartbooks are available that describe the status of professional education in specific professional fields. Because they present numerous data on student characteristics, school policies and procedures, and curricula, these materials are adequate to inform professionals and other persons with interests in the fields described. Their usefulness and interest for educational professionals and planners is more limited, however. None of these focused reports provides an overall perspective on changes occurring in professional education: comparisons among professions are not made, and the effects of developments in one professional field on another are not examined. Given the data that exist, we recommend that NCES issue a social indicator report that will provide such a perspective. This report, which could be designed as a chapter for

The Condition of Education, would be of interest to educational planners and would allow professionals and professional educators to assess the relative status of their fields more accurately.

Data Availability and Quality

The availability and quality of data related to the status of women and minorities in education is summarized in Figures 1-8. (These figures correspond to Figures 2, 3, and 8 to 13 in the literature review and conceptual framework on the status of women and minorities in education submitted to NCES in December 1978.) The eight dependent variables in these conceptual frameworks are (1) educational aspirations, (2) enrollment decisions, (3) retention and dropout rates, graduation, and educational attainment, (4) educational resources and school environments, (5) educational achievement, (6) subject matter, (7) employment as teachers, and (8) employment as administrators at educational institutions.

For each of the variables in the conceptual frameworks, the figures display the target population groups and levels of education for which that variable should be measured. Most variables need to be disaggregated separately by sex and racial/ethnic group; in some cases, however, the variable is only relevant to minorities at the macrolevel (e.g., education of parents, family income) or does not need to be disaggregated at all (e.g., state of the economy). Also, most variables require separate measurement for each of the levels of education that are of interest. For example, enrollment data are needed at the levels of preprimary schools, colleges and noncollegiate postsecondary schools, and graduate schools, while graduation rates are needed at the secondary, undergraduate, and graduate levels. The most important levels of education for each variable are indicated in the figures by the letters e, s, u, and g: e refers to nursery school, kindergarten, and elementary school; s refers to secondary school; u refers to undergraduate education, including two- and four-year colleges, universities, and noncollegiate postsecondary schools; g refers to graduate education, including master's programs, doctoral programs, and professional schools (e.g., law, medicine). The only cases where

these symbols may seem ambiguous are in Figures 7 and 8, employment as teachers and as administrators at educational institutions. For the variables "employment as teachers," "employment as administrators," and "scholarly productivity" in these figures, the letters e, s, and u refer to the level of school at which the person is employed (u stands for higher education, both undergraduate and graduate); for all other variables, the letters refer to students at particular levels of education, as usual.

Most of the dependent variables (separate by target population group and education level) are well measured, with the exception of the following five cases for which we have not located time series: (1) retention and dropout rates for minorities in graduate school; (2) educational resources and school environments for minorities at all levels of education and for women in undergraduate schools; (3) educational achievement of undergraduate minorities and graduate women; (4) employment of minorities as college faculty; and (5) employment of minorities as college administrators. Of the 58 data series needed to measure the dependent variables, a data source has been found for 95% of them, 90% are measured by time series, and 18 are annual time series that extend back at least 20 years from the present.

Figures 1-8 contain 14 influencing factors other than the dependent variables. Although data sources have been found for most of these variables, they are not as well measured as the dependent variables. Time series have not been located for the following seven cases: (1) career plans of women and minorities in high school and in graduate school; (2) admission practices concerning women and minorities applying to college; (3) part-time enrollment of minorities in college and graduate school; (4) financial aid for women and minorities in graduate school; (5) remedial programs for minorities in elementary school; (6) assigning minorities to academic tracks in elementary school; and (7) scholarly productivity of women and minorities employed as teachers at colleges and universities. Of the 46 data series needed to measure the influencing factors in the figures, a data

source has been found for 87% of them, 70% are measurable by time series, and 20 are annual time series that extend back at least 20 years from the present.

Research Questions

The following research questions can be addressed with the available data and should be discussed either in a comprehensive social indicator report or in one of a series of social indicator reports. When the target population groups are not explicitly mentioned, one should assume that these research questions are specific to the status of women and minorities in education relative to men and whites.

Educational Aspirations (Figure 1)

- What are the educational plans and expectations of high school and college students? How have they changed over time?

- At what rates have these plans been met or exceeded?

- How have educational aspirations been affected over time by level of family income and parents' level of education? What effect might the change in income of minority families relative to white families have on educational aspirations in the future?

- How has the educational attainment of minority adults changed over time? What effect might this change have on the educational aspirations of their children in the future?

- Have educational aspirations varied as a function of the state of the economy? If so, which groups of students have been affected the most?

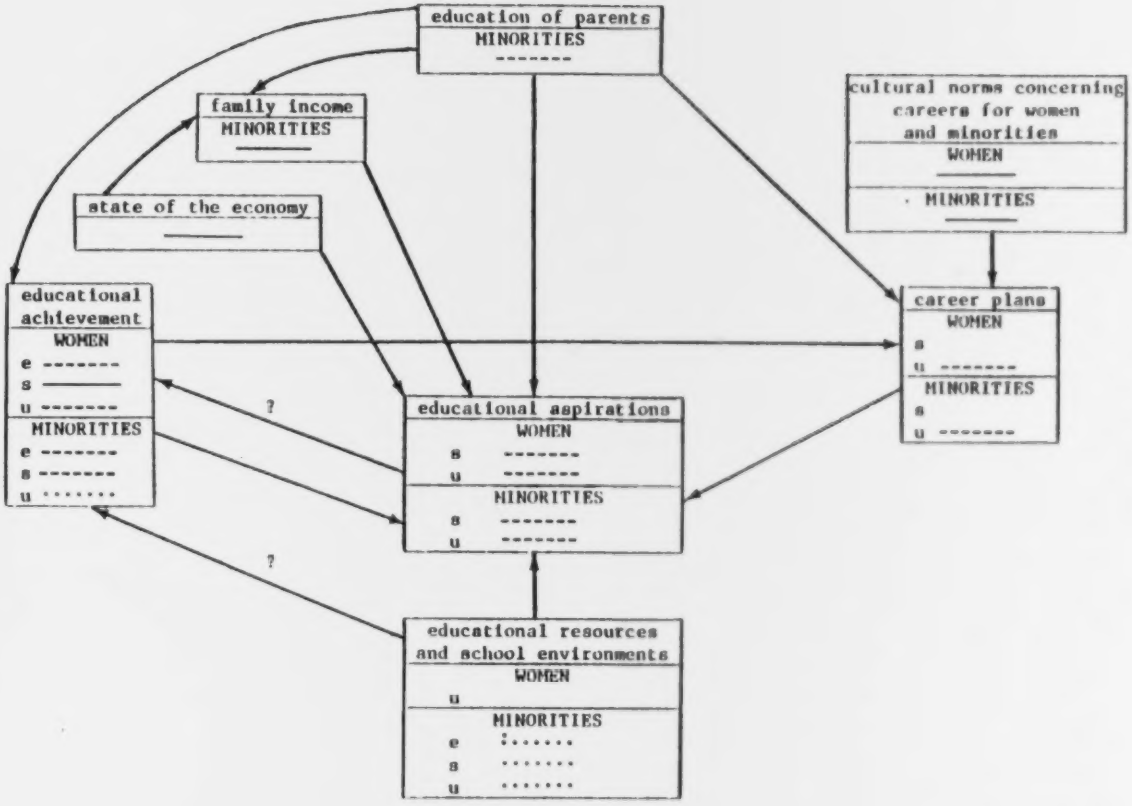

Figure 1. Major variables related to the educational aspirations of women and minorities and summary of data availability.

e = elementary
s = secondary
u = undergraduate

..... = one data point
-------- = short or nonannual series of data
———— = twenty or more annual points

- In what ways has the distribution of career plans changed in the last decade? To what extent have the changes in educational aspirations been in correspondence with the changes in career plans?

Enrollment (Figure 2)

- Among those qualified to enroll, what proportion have enrolled at each successive educational stage?

- How has the rate of enrollment in kindergarten and nursery school been changing? To what extent is it a function of family income?

- How have enrollment rates in college and graduate school responded to earlier changes in educational aspirations? Are educational plans good or poor leading indicators of changes in enrollment rates and educational attainment?

- What have been the results of admission practices in higher education? How do the acceptance-to-application ratios compare to the ratios for white males? Is there evidence of discrimination or of changes in the caliber of applicants?

- What have been the rates of part-time enrollment? What student characteristics (e.g., age, family income) have been associated with higher rates of part-time enrollment? Is there evidence that the availability of part-time enrollment and other flexible enrollment policies increase or decrease total educational attainment?

- Has the availability of financial aid weakened the relationship of family income to enrollment rates over time? When controlling for family income, how representative has the distribution of financial aid been among the racial/ethnic groups?

Retention and Dropout Rates, Graduation, and Educational Attainment (Figure 3)

- What have the dropout rates been prior to completing each educational stage?

- What has been the influence of economic factors (e.g., unemployment rates, family income, financial aid) on retention rates over time?

- To what extent have higher dropout rates for women and minorities been related to marriage and child-rearing rates at various ages?

- How well do changes in educational aspirations signal later changes in retention rates, graduation rates, and total educational attainment?

- What graduation rates are projected for the near future as a function of educational plans, unemployment rates, family income, financial aid, and marriage and fertility rates?

Educational Resources and School Environments (Figure 4)

Unless better data sources are found, a social indicator report would not be able to address any research questions on this topic other than:

- How much sexual or racial segregation (at the school level) still exists, and how has the amount changed over time?

- How have women's colleges and historically black colleges compared to other colleges and universities over time in terms of the abilities of their students and the distribution of students' majors? How have the students at "segre-

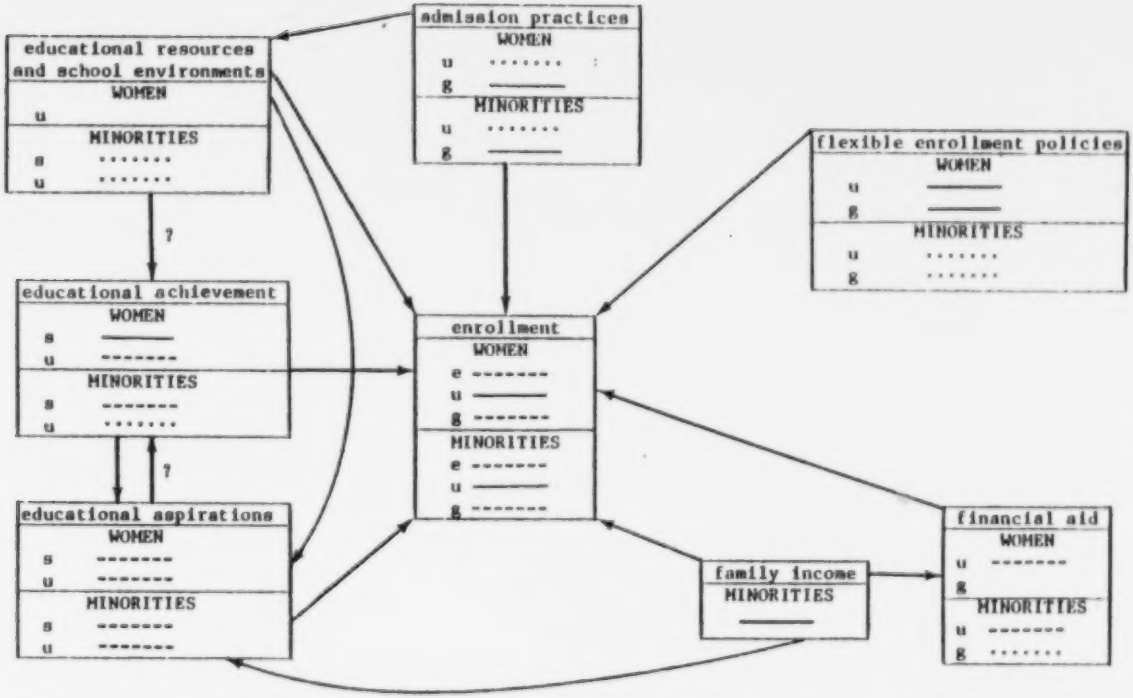

Figure 2. Major variables related to the enrollment of women and minorities and summary of data availability.

e = elementary
s = secondary
u = undergraduate
g = graduate

..... = one data point
------- = short or nonannual series of data
——— = twenty or more annual points

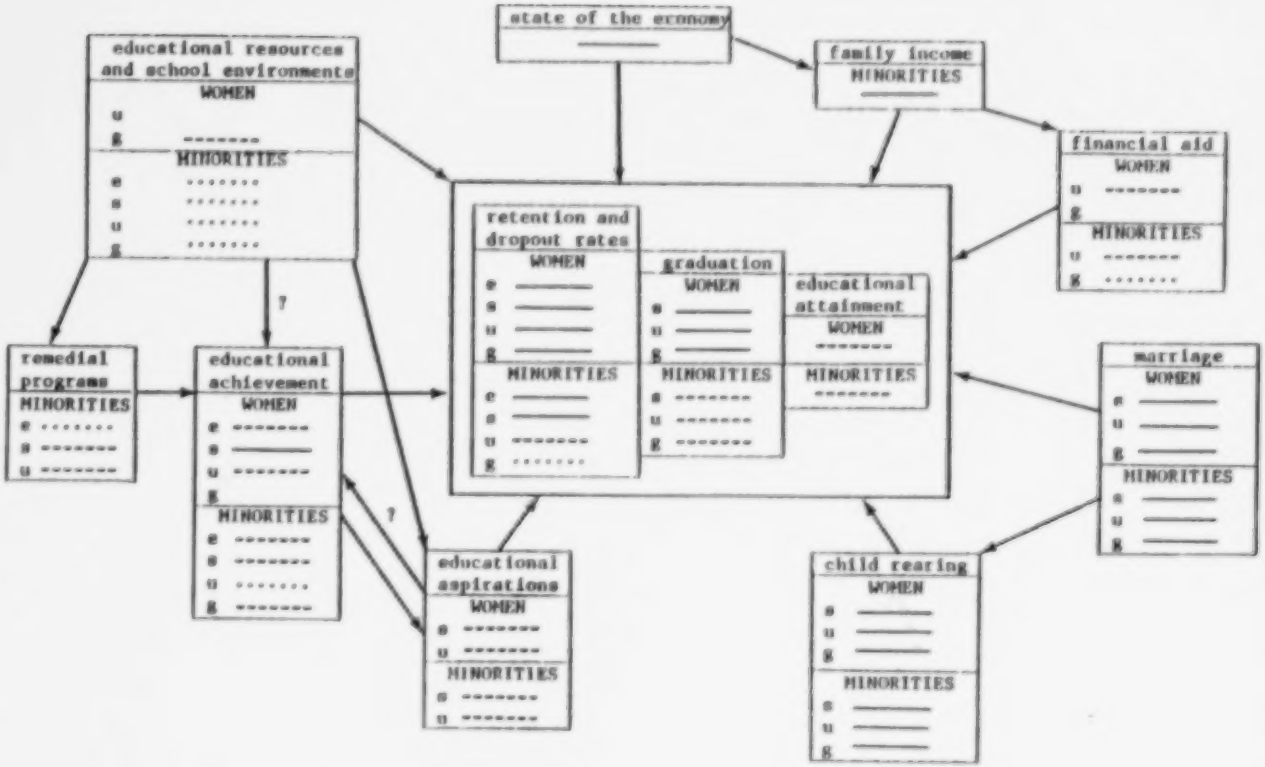

Figure 1. Major variables related to retention and dropout rates, graduation rates, and educational attainment for women and minorities and summary of data availability.

e = elementary
s = secondary
u = undergraduate
g = graduate

..... = one data point
------ = short or nonannual series of data
——— = twenty or more annual points

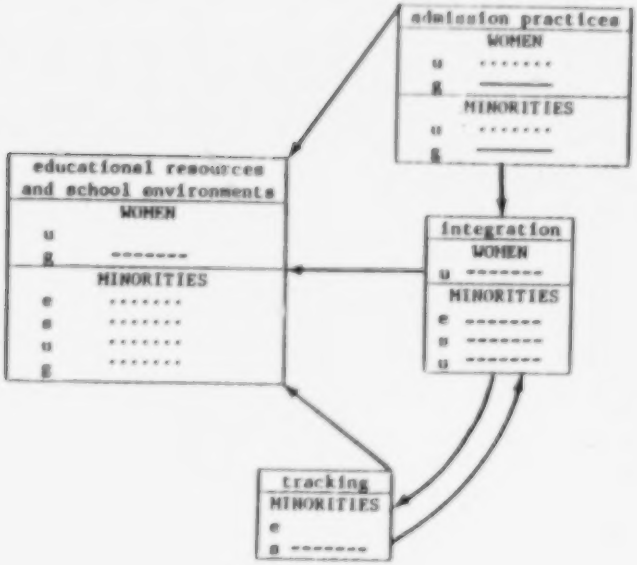

Figure 4. Major variables related to educational resources and school environments for women and minorities and summary of data availability.

e = elementary
s = secondary
u = undergraduate
g = graduate

..... = one data point
------ = short or nonannual series of data
——— = twenty or more annual points

gated" colleges differed from other college students in terms of their backgrounds, abilities, and aspirations?

Educational Achievement (Figure 5)

- What are the levels of achievement in various content areas of high school, college, and graduate students? How have these levels changed over time?

- Have changes in educational achievement preceded or followed changes in educational aspirations?

- How has achievement been affected over time by the extent of racial integration in elementary and secondary schools?

- To what extent can the differential achievement rates of women and minorities over time have been due to the academic tracks to which they were assigned and the courses that they took in high school?

- Is there evidence of increasing achievement corresponding in time to increasing expenditures for remedial programs (e.g., compensatory education, bilingual education)?

Subject Matter (Figure 6)

- What courses and majors have women and minorities elected? How has this distribution varied over time relative to white males? What implications do recent changes in selected majors and graduate programs have for occupational distributions in the near future?

- Have changes in educational achievement in particular content areas in high school been reflected in later choices of subject matters in college?

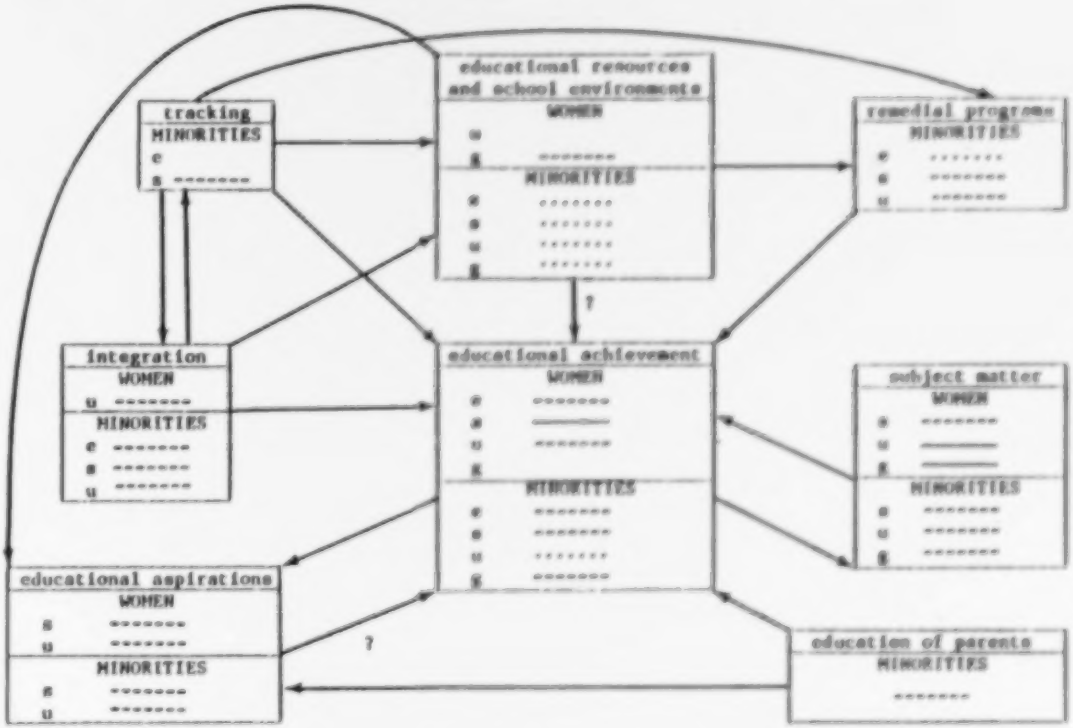

Figure 5. Major variables related to educational achievement of women and minorities and summary of data availability.

e = elementary
s = secondary
u = undergraduate
g = graduate

..... = one data point
------ = short or nonannual series of data
——— = twenty or more annual points

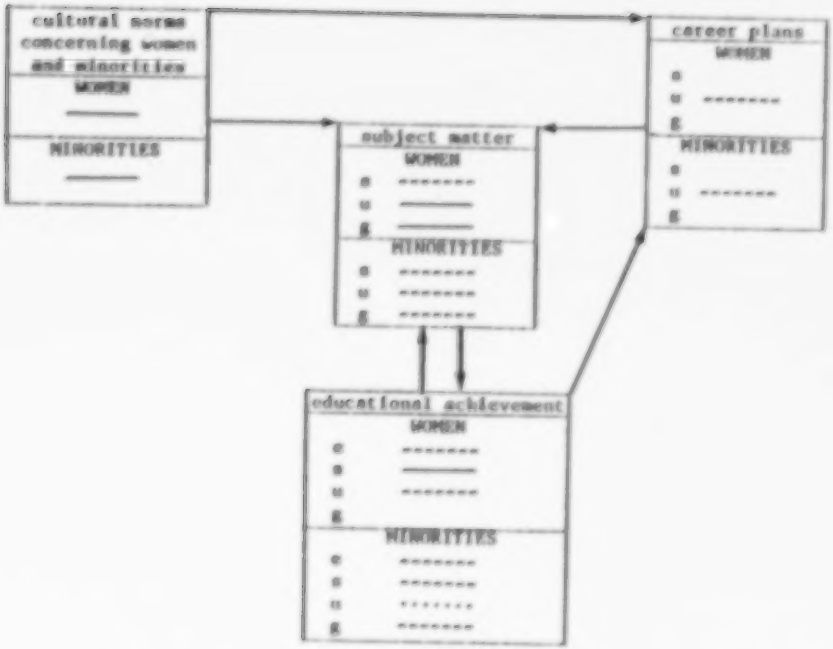

Figure 6. Major variables related to the subject matters chosen by women and minorities and summary of data availability.

e = elementary
s = secondary
u = undergraduate
g = graduate

..... = one data point
------ = short or nonannual series of data
——— = twenty or more annual points

- Have courses taken in high school and majors elected in college corresponded to changes in career plans of the various target groups?

- What is the relationship between prevailing cultural norms concerning abilities and occupational roles of women and minorities and their selection of subject matters?

Employment as Teachers (Figure 7)

- How has the sexual and racial stereotyping of various teaching roles changed over time?

- How have career plans, subject matters taken, and graduation rates from colleges and graduate programs been related to later rates of employment as teachers?

- To what extent are teachers segregated with students of the same sex or ethnic background? Do female faculty members in colleges tend to teach subjects in which most of the students are women, and how has this relationship changed over time? How has the tendency of minority teachers to be employed in minority schools been changing over time?

- What is the scholarly productivity of college and university faculty (relative to white males with the same amount of experience)? What factors may account for any differences? Is scholarly productivity rewarded equitably in terms of promotions and salary?

Employment as Administrators at Educational Institutions (Figure 8)

- What proportion of administrators have been women or minorities? How has this proportion been changing? How has the proportion varied as a function of the type of administrative

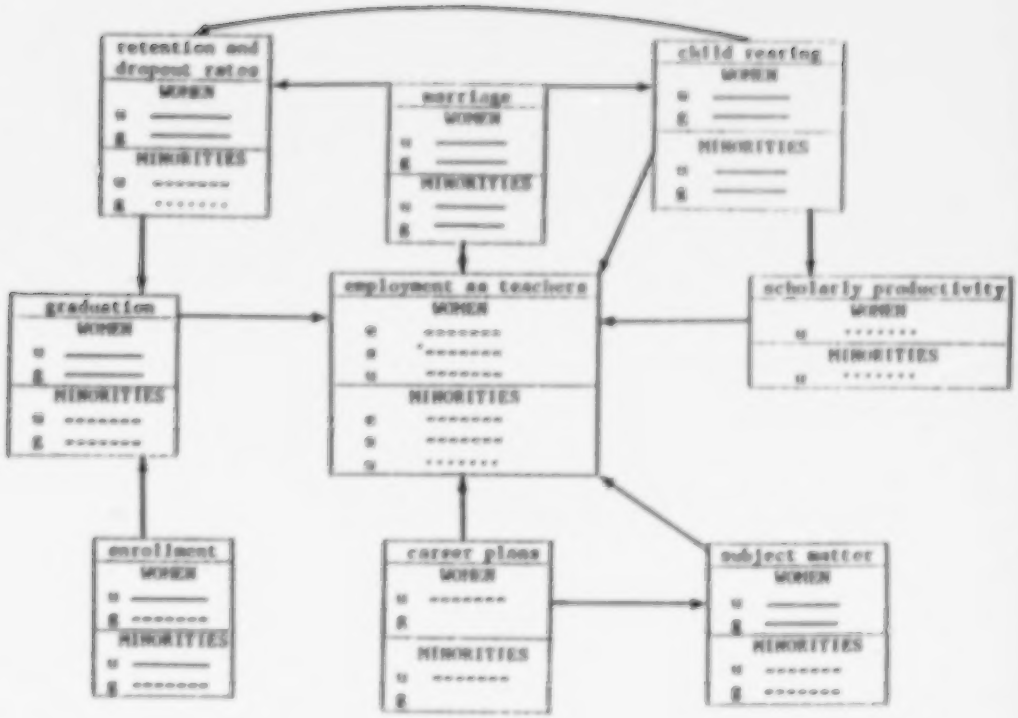

Figure 7. Major variables related to the employment of women and minorities as teachers and summary of data availability.

e = elementary
s = secondary
u = undergraduate
g = graduate

..... = one data point
------ = short or nonannual series of data
——— = twenty or more annual points

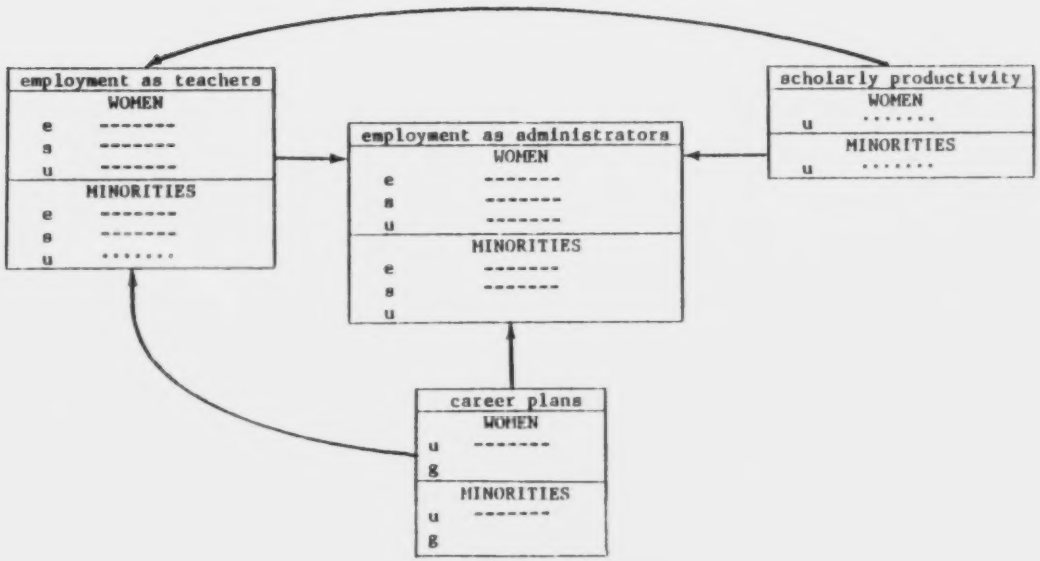

Figure 8. Major variables related to the employment of women and minorities as administrators at educational institutions and summary of data availability.

e = elementary
s = secondary
u = undergraduate
g = graduate

····· = one data point
------ = short or nonannual series of data
——— = twenty or more annual points

job? What types of schools have been more likely to hire or promote women and minorities into the administration?

- How have changes in employment as teachers been related to changes in employment as administrators over time? Is there a lag of several years between the two time series? What proportions of administrators are projected to be women or minorities in the near future?

Data Analysis and Reporting

Sufficient data are available for several social indicator reports on the status of women and minorities in education. The data are disaggregatable by sex more often than by race, and consequently the quality of data on the status of minorities in education is poorer than the quality of data on the status of women (as is indicated in Figure 1-8).

An analysis problem specific to the status of minorities in education is the multiple definitions of "minority." Various data sources have disaggregated their data by race in differing ways, with the frequent result that educationally disadvantaged minorities (e.g., Hispanics) are grouped with whites and nondisadvantaged minorities (e.g., Orientals) are grouped with blacks. Common disaggregations include (1) whites (including nonblack Hispanics) versus blacks, (2) whites (including nonblack Hispanics) versus nonwhites (including Orientals), (3) whites versus nonwhites (including Hispanics and Orientals), and (4) whites versus blacks versus other (Hispanics, Orientals, American Indians). Seldom are Hispanics or Orientals disaggregated from the rest; and even more rarely are American Indians listed separately or Hispanics disaggregated into Cuban-Americans, Puerto Ricans, and Mexican-Americans. Although it would be most useful to present each ethnic/ racial group separately in a social indicator report or to combine the data for whites and Orientals while keeping the other groups separated, this cannot be done consistently

in a report based on existing data. As a result, whose educational status is being compared in a social indicator report will vary from analysis to analysis and from figure to figure. To reduce the confusion that could result, we recommend that a set of symbols be used consistently throughout the report to indicate the various combinations of population groups. Six symbols, which can be represented as different types of lines on graphs or textures on bar graphs, would be required: (1) whites (not including Hispanics), (2) whites (including nonblack Hispanics), (3) blacks, (4) Hispanics, (5) nonwhites (including Hispanics and Orientals), and (6) nonwhites (including Orientals but not including Hispanics). In addition, each figure should specify verbally which groupings are being used.

Many of the data series could be converted into indexes of the status of women or a minority group to the status of the relevant comparison group (men or whites). These indexes would be unitless if they were computed as the ratio of the status of the target group to the status of the comparison group (e.g., the educational attainment of blacks divided by the educational attainment of whites). (See Tipps and Zimbler, Social Indicators of Equality for Minorities and Women, for an example of such indexes of status.) Indexes of this sort have the advantage that status on several aspects of education (e.g., enrollment, achievement, attainment) can be compared in a single figure without the clutter of separate scales for each variable. Although only data on a ratio scale can be converted into unitless indexes as described here, most of the variables in the conceptual frameworks do have true zero-points. The original data (in units of numbers of students, years of education, and so on) will need to be presented also in the social indicator report, since the absolute levels of a variable could change proportionally for both the target group and the comparison group, which would not change the ratio or the index.

Multivariate (structural equation) modeling may be possible in the content areas of undergraduate enrollment, retention and dropout

rates, graduation of women, and subject matters chosen by women. Only in these areas are time series with 20 or more annual points available (the solid lines in Figures 1-8), and a minimum of 20 points are required by the statistical procedures.

Since many more of the key variables can be measured using shorter annual series, univariate forecasting will be feasible for a greater number of variables. (Armstrong, 1978, p. 151, has recommended that the number of periods of historical data be equal to four times the square root of the number of periods to be forecast.) Of the four most common methods of extrapolating time-series data, we recommend that exponential smoothing or moving averages models be used, since these approaches are most desirable in terms of understandability, cost, and long-range accuracy.

Because the educational status of women and minorities involves many content areas, research questions, and data series, we recommend that a series of social indicator reports on the topic be issued. Each report in the series might address a specific content area: for example, one report might cover educational aspirations, enrollment, retention and dropout rates, graduation, and educational attainment, while a second report might cover educational resources, school environments, subject matters chosen, and educational achievement. Later reports could be devoted to the employment status of women and minorities in various education-related professions.

As was noted in the literature review submitted earlier (Gilmartin, 1978), the statuses of women and of educationally disadvantaged ethnic minorities should be presented in separate series of social indicator reports. The problems each of these groups faces, the educational stages at which these problems occur, and the factors related to them are quite different. In addition, certain topics are much more important for one group than for another. For example, there are larger differences in educational resources, school environments, and educational achievement between minorities and whites than between women

and men. In summary, we recommend that NCES issue a series of reports that address the status of women and minorities in education: three on the status of minorities and two on the status of women (excluding chapters on educational resources, school environments, and educational achievement).

Data Availabilty and Quality

Figures 9 and 10 summarize the availability and quality of data that have been accessed and can be used to produce one or more social reports on the federal role in elementary and secondary education. Where it was possible and useful to do so, the quality of the available data is shown for specific types of variables within a particular variable class (e.g., federal elementary and secondary expenditures for educational programs versus expenditures for research and development).

Time-series data have been found for the dependent variables described by the center boxes in each of these figures. Of the 12 independent variables, annual time series that go back at least 20 years from the present have been found for 7 of them, 3 more are measurable by short or nonannual series, and indicators based on one-time data collections were found for the remaining 2 variables. The indicators for these two variables (court decisions and research findings), although not repeated measures, will be useful for interpreting trends, periodic changes, and fluctuations in rates of change in the other series.

Research Questions

A social indicator report on the federal role in elementary and secondary education must address research questions in two major issue areas: (1) the responsiveness of federal elementary and secondary education expenditures to the education-related needs of children and of schools (e.g., to what extent are efforts to promote equal educational opportunities also improving the overall quality of educational experiences) and (2) the effects of the increasing influence exerted by the federal government on state and local education agency policies and practices (e.g., to what extent have the curricula changed in schools that receive federal monies). The questions related to these

areas that can be addressed using existing data are listed below. Many questions that would be interesting to address in a social indicator report on the federal role in elementary and secondary education cannot be posed because the data are not currently available. (Since this constraint does not apply to the stating of issues concerning the federal role, many examples of the sorts of questions that would be both important and interesting to address in a social indicator report are presented in Issues in Elementary and Secondary Education, a SAGE Draft Technical Report.) As additional data sources of acceptable quality are located for the variables shown in Figures 9 and 10, new questions related to these issue areas can be posed and the appropriate analyses performed.

Elementary and Secondary Expenditures (Figure 9)

- What has been the pattern of federal elementary and secondary expenditures over time?

- To what extent have the levels and objectives of federal expenditures for educational programs been influenced by research and development findings and products?

- How have federal elementary and secondary expenditures compared to federal expenditures in other social welfare areas, especially for higher education?

- In what ways has the ratio of federal expenditures for elementary and secondary education to expenditures for higher education changed as a function of changing economic and social conditions?

- Which needs of schools and students have been most pressing in the past, and which are likely to be most severe in the future?

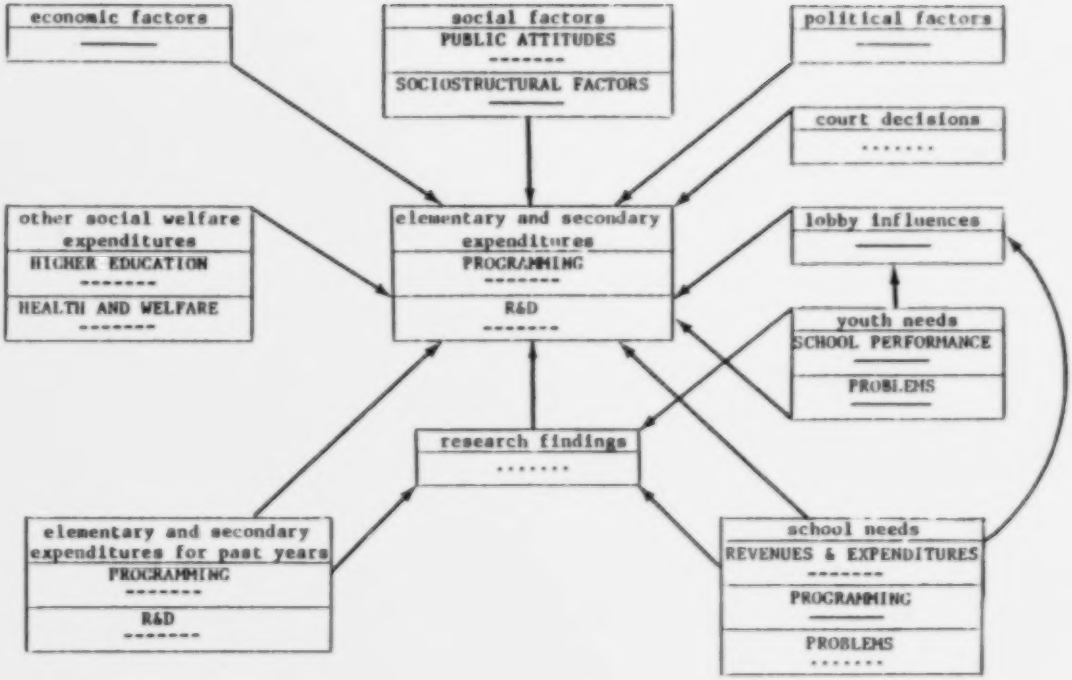

Figure 9. Major classes of variables related to federal expenditures for elementary and secondary education and summary of data availability.

..... = one data point
------ = short or nonannual series of data
——— = twenty or more annual points

- What efforts have been made at the federal level over time to address these needs, either through the creation of new educational programs or the support of relevant research and development activities?

- To what extent have multi-year federal commitments to elementary and secondary education programs affected the responsiveness of the federal government to new educational issues?

- To what extent have changing social and political conditions changed the appropriations to elementary and secondary education over time?

- How has the education lobby responded to the needs of schools, teachers, and students?

- What has been the influence of federal court decisions on federal elementary and secondary programs over time?

Federal Influence (Figure 10)

- In what ways has the federal government influenced elementary and secondary school practices?

- To what extent have federal expenditures, guidelines, and regulations brought with them additional reporting requirements for school officials and teachers?

- In what ways has the federal government influenced the nature of research and development activities in education?

- Have the funding strategies used by the federal government tended to increase the involvement of certain types of organizations in research and development efforts?

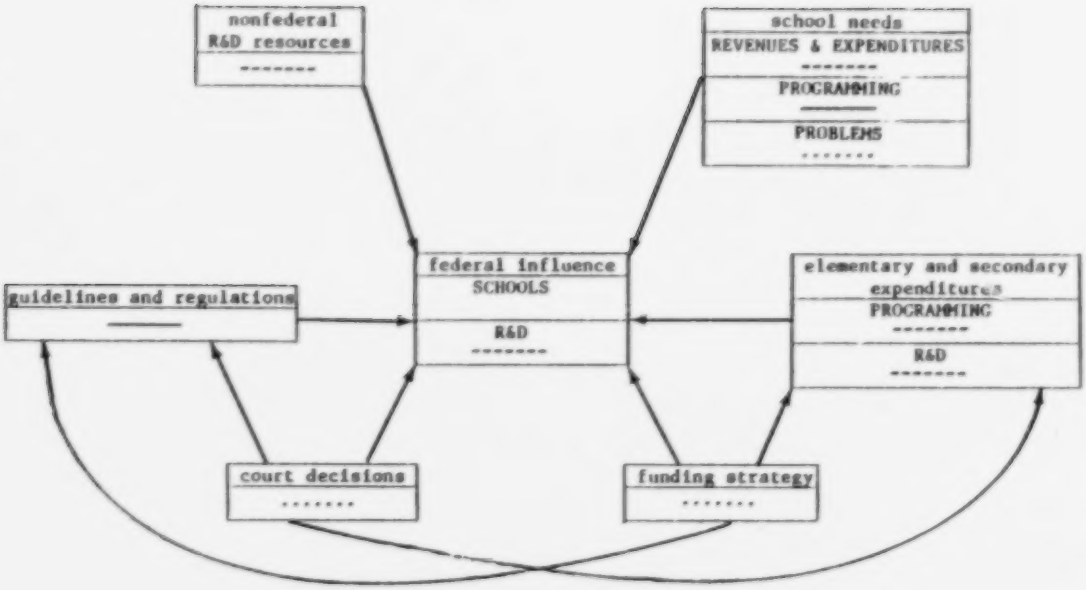

Figure 10. Major classes of variables related to federal influence in elementary and secondary education and summary of data availability.

..... = one data point
----- = short or nonannual series of data
——— = twenty or more annual points

- What amounts of support for elementary and secondary schools and for research and development are provided by nonfederal sources?

- Has the availability of state, local, and other nonfederal revenues affected the rates at which schools seek federal educational assistance or comply with federal requirements once such assistance is provided?

- What changes in school practices and expenditures have been related to federal court decisions (e.g., the ruling that busing be used to promote desegregation of school facilities)?

Data Analysis and Reporting

Federal expenditures for elementary and secondary education are disaggregated by federal agency, purpose, program or program area, target group, and administrative unit through which monies are provided for educational services, depending on the series that is used. Each series differs, however, in the total expenditures that are reported: one series may focus on total Office of Education expenditures, while another may describe state-administered federal funds only. Total federal expenditures for elementary and secondary education programming, which includes funds from all federal agencies that are provided to schools, is one example of the sort of time series that can be examined. Analyses may be performed to assess the effects on this biennial series of (1) health and welfare expenditures, (2) economic, sociostructural, and political factors, (3) school-related needs of youth, and (4) school revenues from nonfederal sources, all of which are described by sufficiently long annual series to permit biennial comparisons. Such analyses would examine whether prolonged periods of economic sluggishness result in reduced federal spending for education in favor of greater spending in other social welfare areas that are likely to provide more immediate benefits to those in need. Analyses of this sort would also attempt to describe

the relative influence of factors that might account for the differing amounts of federal monies invested in higher versus elementary and secondary education during past years. For example, during periods of military expansion, federal spending for higher education may be reduced in favor of increased spending for military training under the assumption that many of those young people who would have attended college will now enter the military. During these same periods, it is unlikely that federal spending for elementary and secondary education would similarly be reduced.

Other series describing federal expenditures can be presented in a social indicator report, providing the categories into which they are disaggregated are precisely defined. Often these categories are very general (e.g., disadvantaged children), and in many cases, while it is clear substantial funds are targeted in the area for elementary and secondary education, funds for other education levels have been included also (e.g., vocational education). In some cases, it will be more interesting and informative to readers if expenditures are recombined into new categories. For example, data describing the total federal appropriations for Office of Education elementary and secondary school programs may be aggregated to form series that describe the total appropriations for remediation, advanced training, and so forth. These data may also be aggregated to reflect total Office of Education expenditures for various student subpopulations (e.g., the handicapped, racial/ethnic minorities) based on additional data that describe the characteristics of students participating in each program. Although descriptions of primary program activities may depend on some subjective judgment and students will, in many cases, participate in more than a single program (resulting in some double counting), these approaches to presenting federal expenditures may provide new perspectives on the federal role. Similarly, federal expenditures for educational research and development, which are currently reported by program or by program area for Office of Education expenditures and by more general research areas (e.g., teaching and learning) for the National Institute of Education, may be better described in terms of categories such as

knowledge production (e.g., basic research), problem solution (e.g., evaluation), and utilization (as suggested by Mason and Nelson, 1978). Depending on the categories that are selected, univariate forecasts can be made of federal expenditures for elementary and secondary education in the near future (three to five years ahead), and these projections can be contrasted with forecasts of the demands for federal aid in these same areas.

Since few data have been found to address directly the issue of federal influence in elementary and secondary education (e.g., time series that describe how federal support to research and development efforts has resulted in increased activity in certain content areas while other ones have been neglected), a more indirect approach to this issue appears to be most feasible. Such an approach might examine series describing school operating expenses, disaggregated by specific categories (e.g., transportation of students), and compare the levels of these expenses before and after the occurrence of major federal actions that are likely to have affected them significantly. For example, student transportation costs could be described before and after federal court rulings on school desegregation. Similarly, school expenses for instructional staff and instructional staff training could be compared for periods before and after the institution of federal regulations concerning the necessary qualifications for teachers supported under various categorical aid programs.

Because this area of study is so closely related to the contents and purposes of present statistical compendia and chartbooks issued by NCES (e.g., Digest of Education Statistics, Projections of Education Statistics, The Condition of Education), it does not seem desirable to create a new publication or publication series describing the federal role in elementary and secondary education. Such a dissemination strategy would inevitably lead to the reporting of the same data in several different reports, thus creating the impression that the data were obsolete. A preferred strategy would be to include a chapter on the federal role in elementary and secondary education in The Condition

of Education. In this publication, sufficient attention could be given to the analysis of time-series data, the design of charts describing trends and important influences in the behaviors of these trends, and the preparation of text that would relate the data presented to the issues of federal responsiveness and influence in education. This is the strategy that we recommend for reporting the indicator data summarized in Figures 9 and 10.

CONDITION OF PROFESSIONAL EDUCATION

Data Availability and Quality

Figures 11-13 summarize the availability and quality of data that could be used to produce one or more social indicator reports concerning the condition of professional education. These figures, while based on the conceptual frameworks presented in The Status of Education for the Professions submitted to NCES in January 1979, represent a consolidation of the variable categories used in that report. The majority of the data quality ratings are based on available data describing medical and legal education, with fewer ratings based on data describing engineering, other science-related educational programs, and teaching.

All of the dependent variables can be measured by time series, and several of these series have been updated annually for the past 20 years or more. Student characteristics, recruitment, selection, and retention rates, and school policies concerned with expenditures and programming are measurable by time series with 20 or more annual points, while characteristics of the curricula are measurable only by shorter or irregular time series.

Of the 14 independent variables, 6 are measurable by annual series with 20 or more points and 7 are measurable by shorter annual or nonannual series. At the present time, no series describing the remaining one variable (i.e., technological and social changes) have been found. We anticipate that sources of repeated measures for this variable could be found by searching less prominent data bases.

Research Questions

The following research questions, which focus on the characteristics of students in professional schools, professional school policies and practices, and professional education curricula, would form the

basis for social indicator reports in this area. The substance of the questions that are posed is determined by the availability and quality of the data. The relationships among variables singled out for study by these questions, however, present a dynamic perspective on professional education not usually found in current reports on the professions. Although social indicator reports and chartbooks describing the current status of professional training in specific areas are available (e.g., Nursing Data Book: Statistical Information on Nursing Education and Newly Licensed Nurses, National League for Nursing), these reports do not typically examine the interrelationships among trends, nor do they include time-series data describing societal factors that can influence the nature, content, and demand for professional education.

Student Characteristics (Figure 11)

- What types of students have been enrolling in professional education?

- Which professional areas have been attracting the greatest numbers of traditionally underrepresented student groups?

- What changes have taken place in recruitment and student selection policy? Which of these changes have had the greatest impact on the enrollments of traditionally underrepresented student groups?

- How have retention rates been affected by patterns of changing enrollment?

- In what ways do retention rates respond to changes in recruitment and selection practices instituted one, two, or three years earlier?

- In which professional areas is the greatest demand for practitioners likely to occur in future years?

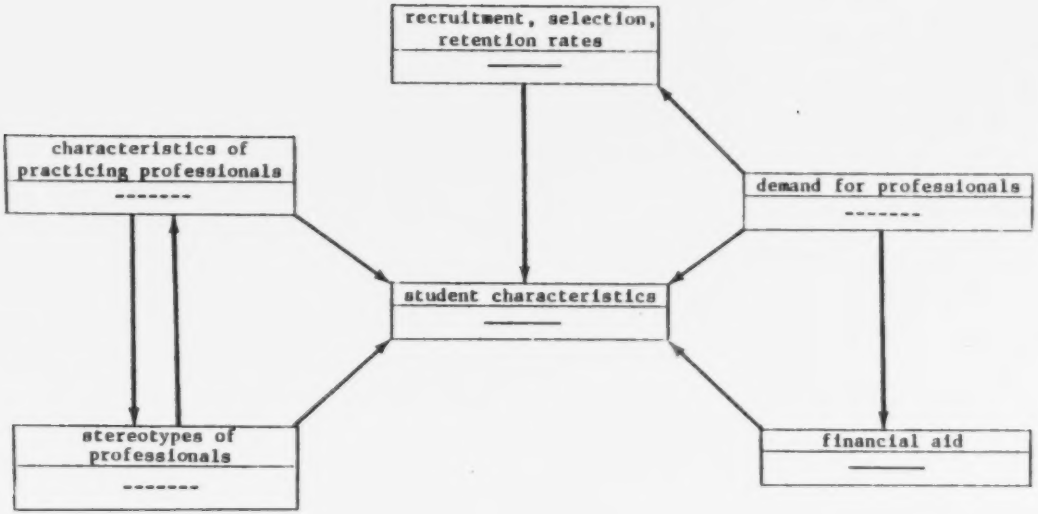

Figure 11. Major classes of variables related to the characteristics of students in professional education and summary of data availability.

····· = one data point
----- = short or nonannual series of data
——— = twenty or more annual points

- To what extent have recruitment, selection, and retention rates been affected by the differential demand for professionals in various areas?

- What amounts of financial aid are available to students in various professional areas?

- Are the amounts of financial aid that are available determined in part by the accreditation status of the professional school?

- What proportions of students in various professional areas have received financial assistance?

- To what extent has the availability of financial aid stimulated the enrollment of traditionally underrepresented student groups?

- In what ways have public attitudes and stereotypes of professionals changed over time? To what extent have these attitudes affected the numbers and types of students enrolling in professional schools?

- How do the characteristics of students enrolled in professional schools compare with the characteristics of practicing professionals?

- How have the characteristics of students in professional schools compared over time to the characteristics of persons seeking the services of professionals?

School Policies and Practices (Figure 12)

- In what ways have state licensing requirements and accreditation standards affected professional school practices?

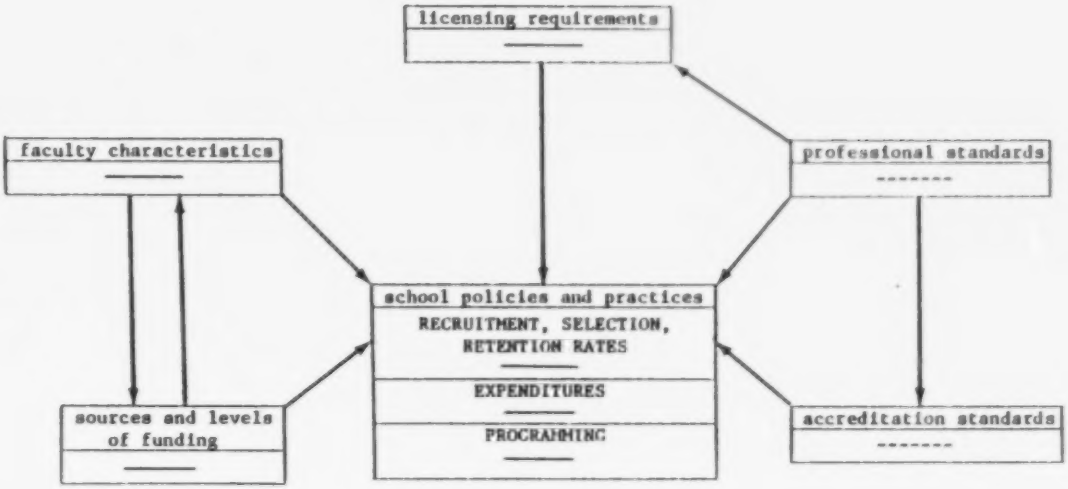

Figure 12. Major classes of variables related to the nature of professional school policies and practices and summary of data availability.

····· = one data point
----- = short or nonannual series of data
——— = twenty or more annual points

- To what extent have these requirements and standards been associated with increases in professional school operating expenses?

- What is the level of federal support for professional schools?

- To what extent has the federal share of professional school costs been associated with the enrollment of traditionally underrepresented student groups?

- What other sources besides the federal government have provided funds for professional school operations? What levels of funding have professional schools received from these sources?

- What are the characteristics of professional school faculties, and how do they compare to the characteristics of practicing professionals?

- What proportion of the faculty members in various professional areas are themselves members of groups traditionally underrepresented in the professional areas?

Curricula (Figure 13)

- In what ways and with what approximate lag have professional education curricula responded to technological and social changes?

- In which professional areas have curriculum changes been most pronounced? Which professional areas have experienced the greatest growth of professional knowledge over time?

- What technological and social changes are projected for various professional fields in the near future?

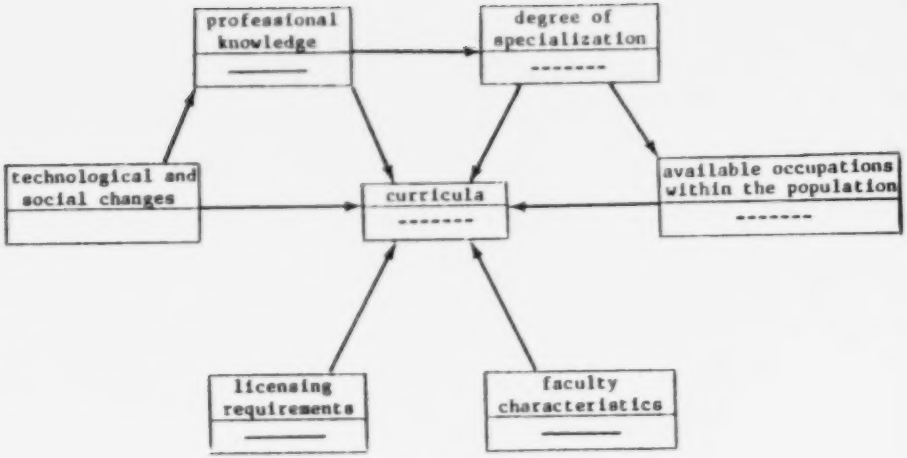

Figure 13. Major classes of variables related to the nature of curricula used in professional schools and summary of data availability.

..... = one data point
----- = short or nonannual series of data
——— = twenty or more annual points

- In which professional areas can the increase in professional knowledge be expected to continue at a rapid rate?

- Which professional areas have experienced the greatest degrees of specialization?

- To what extent has increasing specialization within a professional field been associated with increasing specialization at the student level--with the possible results that (1) students must decide on a specialty at an earlier point in their schooling and (2) career shifts within a profession become more difficult to make?

Data Analysis and Reporting

As noted earlier, several statistical reports and chartbooks are available that describe the status of professional education in specific professional fields. Because they present numerous data on student characteristics, school policies and procedures, and curricula, these materials are adequate to inform professionals and other persons with interests in the fields described. Their usefulness and interest for educational professionals and planners is more limited, however. None of these focused reports provides an overall perspective on changes occurring in professional education: comparisons among professions are not made, and the effects of developments in one professional field on another are not examined. Given the data that exist, we recommend that NCES issue a social indicator report that will provide such a perspective. This report, which could be designed as a chapter for The Condition of Education, would be of interest to educational planners and would allow professionals and professional educators to assess the relative status of their fields more accurately.

Indicator data on student characteristics, professional school policies and practices, and professional school curricula can be presented for various professions in the report. To preserve the

advantages of direct comparisons among professions, we recommend the social indicator report be organized by topics that are relevant for professional education in all fields (such as accreditation, enrollment, retention rates, and so on) rather than being organized by profession.

Recommended NCES Data Collection Strategies for Inadequately Measured Variables

As was shown above in Figures 1-13, several of the dependent and independent variable classes that ought to be included in social indicator reports for the three content areas are not adequately measurable using existing data. Fortunately, NCES has available a variety of data collection vehicles that can be used to provide the required data for these variables. Table 1 summarizes the potential of various vehicles for this purpose, with the checkmarks designating the alternative strategies that are appropriate for each variable.

In preparing this table, we have aimed to be realistic: data collection strategies have been proposed for a variable only when the additional reporting requirement is well within the purpose and scope of the original survey. Thus, data on the problems facing elementary and secondary schools would be collected using the Common Core of Data, the Elementary and Secondary General Information System, the Nonpublic School Survey, or the Fast Response Survey System rather than the School Finance Survey or the Secondary School Courses and Enrollments Survey whose focus is less general and whose items would typically be completed by school specialists. Furthermore, we have suggested that the Fast Response Survey System be used to collect data only for variables relevant to particularly controversial issues that should be addressed using the most up-to-date information available. We have chosen to list the Common Core of Data, the Elementary and Secondary General Information System, and the School Finance Survey as separate data collection vehicles, although they will eventually be combined into a single data collection system, for the reason that they presently represent distinct data gathering opportunities.

We do not suggest that all the alternative data collection strategies for measuring a class of variables be used. Established dates

TABLE I

NCES Surveys Appropriate for Measuring Various Classes of Variables

Variable Classes	NCES Data Collection Vehicles														
	SPE (CPS)	ELSEGIS	SFS (CG)	CCD	NSS	SEB	SEPD	SSCES	LIBGIS	VEDS	SCSNPS	SPSOP	HEGIS	NLS	SEPS	SPAE (CPS)	PESS
Assignment of students to various academic tracks in elementary and secondary schools (disaggregatable by student characteristics)		✓		✓	✓			✓									
Federal influence on the instructional methods and materials used in elementary and secondary schools		✓	✓	✓	✓			✓		✓							✓
Federal influence on the amounts of time spent on administrative and evaluative tasks by instructional and administrative staff in elementary and secondary schools		✓	✓	✓	✓			✓		✓							
Problems perceived by elementary and secondary school administrators, teachers, and students that directly affect the quality of educational services		✓		✓	✓		✓		✓								✓
Subject matters taken in secondary schools (disaggregatable by student characteristics)								✓									
Career plans in high school (disaggregatable by student characteristics)														✓			
Admissions as a function of applications to undergraduate and graduate schools (disaggregatable by student characteristics, type of school, and field)													✓				
Educational achievement in higher education (disaggregatable by student characteristics)													✓	✓			✓
Financial aid received by graduate students (disaggregatable by student characteristics, type of school, and field)													✓	✓			
Professional school curricula													✓				
More detailed information about employment of teachers and administrators at all levels of education including characteristics of their students and scholarly productivity, where appropriate (disaggregatable by teacher characteristics)							✓								✓		✓
Educational resources and school environments at all levels of education (disaggregatable by student characteristics)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	

SPE(CPS) - Survey of Preprimary Enrollment, conducted using Current Population Survey
ELSEGIS - Elementary and Secondary General Information System
SFS(CG) - School Finance Survey, conducted using Census of Governments
CCD - Common Core of Data
NSS - Nonpublic School Survey
SEB - Survey of Educational Broadcasting
SEPD - Survey of Educational Personal Demand
SSCES - Secondary School Courses and Enrollments Survey
LIBGIS - Library General Information System
VEDS - Vocational Education Data System
SCSNPS - Survey of Characteristics of Students in Noncollegiate Postsecondary Schools
SPSOP - Survey of Postsecondary Schools with Occupational Programs
HEGIS - Higher Education General Information System
NLS - National Longitudinal Study
SEPS - Survey of Educational Personnel Supply
SPAE(CPS) - Survey of Participation in Adult Education, conducted using Current Population Survey

The least expensive data sources to access and the easiest to use are reports with tables that describe time series disaggregated by several variables. For our purposes, multiyear tables disaggregated by race, sex, or professional field were of greatest value. Series of reports that are comparable and can be combined to form annual time series are also desirable sources. If no such data are available, the next step is to request crosstabulations that have been done by an agency or research organization but have not been published. The procedures of last resort, which we did not use during the feasibility study, are either to request that an agency perform special tabulations and other analyses on their data or to purchase data tapes and perform the analyses oneself. If a required time series does not exist, one can very cautiously combine the data from different sources to form a pseudo-time series. Abbott Ferriss (1969, 1978), for example, has used this technique effectively.

Locating Data Sources

Search efforts for the feasibility study were initially concentrated on prominent, centralized data bases, which were preferred for several reasons. For some analyses of the relationships among variables, it is required that all the measures be from the same population. For example, one would prefer that a time series on career plans and a time series on educational aspirations come from the same survey. Large data sources are also more likely to be updated periodically, and reports describing series from these sources are more likely to be issued on a regular basis. Finally, a comprehensive source has the potential of supplying several relevant sets of data, making the search process more efficient.

We first explored data bases that were mentioned explicitly in the research literature for a particular content area, such as the Current Population Reports and the NCES data files. Further searching was guided by information found in several index publications, listed and described in Table 2.

TABLE 2

Indexes to Education-Related Data Sources

Publication	Years Covered	Types of Documents Indexed
American statistical index. Washington, D.C.: Congressional Information Service, 1973-1979.	1960-77	All U.S. government documents that contain statistical information.
Feller, B. Directory of federal agency education data tapes. Washington, D.C.: U.S. Government Printing Office, 1976.	1939-76, with the majority of information collected 1970-74	Elementary/secondary education, postsecondary education, demographic, manpower, and other information concerning federal education expenditures.
Hastings, P. K., & Southwick, J. C. (Eds.). Survey data for trend analysis: An index to repeated questions in U.S. national surveys held by the Roper Public Research Center. Williamstown, Mass.: Roper Public Opinion Research Center, 1974.	1936-73	Series taken from surveys by the Gallup Poll, Institute for International Social Research, National Opinion Research Center, Office of Public Opinion Research, Opinion Research Corporation, and the Roper Organization.
Inter-University Consortium for Political and Social Research. Guide to resources and services. Ann Arbor, Mich.: University of Michigan, 1978.	1789-present	Content extends across economic, sociological, historical, organizational, social, psychological, and political concerns. Largest data collections are election data (1789-present), U.S. census data (1790-1970).
Social Indicators Research Program. Report on a Feasibility Study to Develop Youth-Specific Social Indicators and Data Source Directory. Technical report to the Youth Development Bureau, DHEW. Palo Alto, Calif.: American Institutes for Research, 1977	1935-78, with majority of sources listed covering the years 1965-75	National, state (California), and local (Santa Clara County, California) data sources on the intellectual development, career development, and health and personal safety of youth.
U.S. Department of Labor. Directory of data sources on racial and ethnic minorities (BLS Bulletin #1879). Washington, D.C.: U.S. Government Printing Office, 1975.	Primarily 1968-73, with some references to trend studies and projections 1950-80	Federal publications presenting the social and economic characteristics of minority groups.

Accessing Data

During this phase of the search, we made use of several extensive library collections. Key publications were frequently available only from government document depositories or from libraries associated with professional schools. Telephone contacts were made with recognized experts on the status of women and minorities in education, the federal role in elementary and secondary education, and the status of education for the professions to obtain data on variables for which no published information appeared to be available. Using the grouped variables as an informal interview guide, calls were made to individuals frequently mentioned in the research literature, to researchers who had compiled data similar to those we sought, and to individuals recommended by key organizations as being knowledgeable in a specific area.

Information on hard-to-document variables was collected by means of a telephone survey of groups who themselves were likely to be collecting data of interest. During these telephone conversations, publications lists, copies of survey instruments, and statistical reports were requested. Once these documents were received, further telephone contact was usually necessary to clarify specific questions regarding data quality.

Searching for Additional Sources

When no time series was located that directly measured a variable, we considered various options. First, low probability leads could be pursued in hope of finding a fugitive data source that would provide a direct measure of the variable. Second, we could search for indirect measures of the variable. For example, when no reliable information was found on the amount of money spent by educational lobbying organizations, data describing the memberships of these organizations were accessed as potential alternative measures. Third, we could conclude that no data were available at the present time and terminate the data

source search, at least temporarily. Since time and financial resources did not permit extended searching for all variables, some variables remain unmeasured. (As it is likely that data exist somewhere for some of these variables, information concerning sources for the unmeasured and poorly measured variables would be much appreciated.)

Recommended Procedures

We recommend the following procedures to those interested in establishing a data base for social indicator reporting.

- Construct one or more conceptual frameworks showing the relationships among variables, and use these frameworks to monitor progress in data source searching.

- Substitute a list of explicit measures and variables for the general variable labels in the conceptual frameworks. Dealing in generalities is awkward when calling a potential data source, searching a card catalog, or requesting the assistance of an expert.

- Keep variables of a similar nature grouped together for easy reference during the search. For example, measures of student characteristics, such as age, sex, racial/ethnic group, should be grouped together.

- Identify variables that should be measured from the same data source if possible (e.g., to permit analyses of the relations among them).

- For each variable, make a list of the ways it has to be disaggregated; then keep track of which of those requirements have or have not yet been met in the search.

- Pursue high-yield sources first. In general, this will mean going to publications available from large, centralized data bases before contacting individuals or organizations working in the field.

- If interested in U.S. government statistics, begin your search by consulting the American Statistical Index.

- Locate a library that will allow you to make open-stack searches. Smaller, specialized libraries (e.g, a government documents library, an education library) at large universities typically offer this privilege.

- Cultivate the friendship of a knowledgeable research librarian.

- Whenever you find a table or chart that might be relevant, xerox it immediately and file it by the variable name. If two or more variables are in the same table, make multiple copies of the table and file under each variable.

- Clearly label the source of all xeroxes--this will facilitate further checking of the data source as a suitable provider of information for related variables.

- Clip together all xeroxes of tables that have the same primary source (e.g., a particular series of Current Population Reports). Often they display the same information disaggregated in different ways or extending over overlapping ranges of years. Check that the values in the tables agree. If not, the reason for the discrepancy (e.g., recoding, error, preliminary versus final version) should be sought.

- When time permits, order relevant reports and other documents. Xeroxing can often be a false economy: the personnel costs of extensive xeroxing may be greater than the cost of the document.

- Keep copies of descriptions of the methodology used in various surveys, since the procedures may have changed over time, rendering series values incomparable. (The footnotes of tables are often very useful in this respect.)

- Develop a written protocol for use in telephone contacts, and underline key points. Use this protocol when contacting individuals in the field of interest, and refine the protocol after the first few telephone calls.

- Develop a form on which to record name, address, telephone number, position, and materials promised by a telephone contact. This form will facilitate materials check-in, the sending of thank-you letters, and recontacting of sources.

- Develop a brief description of the project, and mail it to those people you contact who wish to learn more about your search.

- Designate a back-up person to answer your telephone, and give those you are trying to contact the option of returning your call collect. (This is especially important when calling nongovernmental agencies with small budgets.)

- When calling a new and unfamiliar agency, ask to speak with someone in authority (e.g., the director, the president) who can direct you to the department most likely to have the information you desire. Depending on the organization, this information might be located in the publications department, the research office, or in the files of a staff member directing a special project.

- Get leads from the people you talk with. Even if they do not have the information you need, they may be able to direct you to someone who does.

- When data have been found for most of the variables, make a list of the variables that remain unmeasured or are only poorly measured. This list will help focus your continued activities. Cross off items as you find data for them.

- To guard against misinterpretations and to fill in gaps, have an expert in the field review the sources that you have located.

- As a last resort, use series with smaller sample sizes, series that can be compiled from diverse sources, and series that are only slightly out of date (e.g., two or three years old).

Available Data Sources

In the remainder of this report, we have listed data sources for all the variables in the conceptual frameworks (Figure 1-13). The data source lists are divided into three sections corresponding to the content areas covered by the report: (1) the status of women and minorities in education, (2) the federal role in elementary and secondary education, and (3) the condition of professional education. Within each section, the variables are ordered alphabetically, and the time series and their data sources are grouped by subject matter (e.g., level of education, type of profession) under these variables.

We have made every effort to list the primary sources for these data. When possible, we extended series by locating comparable data for earlier years, and if we could reasonably assume that a series had been continued since the most recent update, we listed it as continuing to the present. Whenever a range of years is indicated (e.g., 1962-75), the series has been updated annually during those years unless otherwise noted. We have already accessed most of these time series, with the possible exception of the most recent update.

ADMISSION PRACTICES

ACT score and high school grade norms for enrolled students from families with income under $7,500 by race.

1971

American College Testing Program Assessing students on the way to college (Vol. 2). Iowa City: American College Testing Program, 1972.

Applications, admissions, and matriculations at Stanford University by school and sex.

1971

Task Force on Women. The study of graduate education at Stanford: Report of the Task Force on Women. Stanford, Calif.: Stanford University, 1972.

Proportions of women in graduate applications and admissions at the University of California, Berkeley.

1971

Pearce, R. H. Women in the graduate academic sector of the University of California. Los Angeles: University of California, 1972.

Medical school applicants' acceptance ratio by sex and (race).

1929-30,1932-42,1948-present

Association of American Medical Colleges. Annual studies of applicants. (Race added in 1968.)

CAREER PLANS

Weighted national norms for freshmen on 44 probable careers by sex, race, type of college, and racial composition of college.

1966-present

Cooperative Institutional Research Program, American Council on Education and University of California at Los Angeles. The American freshman: National norms.

CHILD REARING

Fertility rates by cohort and race.

1917-73

U.S. Department of Health, Education and Welfare, National Center for Health Statistics. Fertility tables for birth cohorts by color: United States, 1917-73.

Fertility rates by race, age of mother, and age of father.

1940-present

U.S. Department of Health, Education, and Welfare, National Center for Health Statistics. Vital statistics of the United States and monthly vital statistics reports.

Live births by educational attainment, legitimacy status, age, and race of mother.

1966-75

U.S. Department of Health, Education, and Welfare, National Center for Health Statistics. Teenage childbearing: United States, 1966-75. (Monthly vital statistics report, Vol. 26, No. 5).

Children ever born per 1,000 women by race.

1947,1949,1952,1954,1957,1959,1962,1964,1967-69,1971-72, 1975-present

U.S. Department of Commerce, Bureau of the Census, Current Population Reports, Series P-20, Nos. 46(1952), 65(1954), 84(1957), 108(1959), 147(1962 & 1964), 186(1968), 203(1969), 211(1967), 226(1969), 248(1972), 263(1971), 288(1975), 301(1975), 308(1976), 325(1977), 330(1978).

Number of live births, birth rates, and fertility rates by race.

1909-75

U.S. Department of Health, Education, and Welfare, National Center for Health Statistics. Trends in fertility in the United States (Series 21, Number 28).

Median ages of women starting familes and bearing children by race.

1960,1970-73

U.S. Department of Health, Education, and Welfare, National Center for Health Statistics. Trends in fertility in the United States (Series 21, Number 28).

CULTURAL NORMS CONCERNING CAREERS

Sex of students in noncollegiate postsecondary schools with occupational programs by type of program, status of student, and control of school.

1973

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Enrollments and programs in noncollegiate postsecondary schools.

Percentages of women among master's degree recipients by discipline division and (race).

1948-present

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Master's degree awards to women. (Race for 1976 only.)

Percentages of women among first-professional degree recipients by discipline division and (race).

1961-present

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. First professional degree awards to women. (Race for 1976 only.)

Percentages of women among doctoral degree recipients by discipline division and (race).

1948-present

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Doctoral degree awards to women. (Race for 1976 only.)

Field of study of persons receiving doctor's degrees by sex, race, and marital status.

1973-present

National Academy of Sciences, Commission on Human Resources, National Research Council. Doctorate records file.

Women employed as wage and salary workers in nonagricultural industries.

1940,1950,1960,1970

Steiger, J. Literature and secondary data review of the vocational education equity study. Report to U.S. Office of Education, DHEW, 1979.

Employed persons by sex.

1950,1960,1970

U.S. Department of Commerce, Bureau of the Census. 1970 occupation by industry.

Occupational distribution of employed women and men by race and Spanish origin.

1976

U.S. Department of Labor, Bureau of Labor Statistics. U.S. working women: A databook.

Employed persons by occupational group, race, and sex.

1958-present

U.S. Department of Labor. Handbook of labor statistics.

Occupations of employed persons by sex and race.

1960,1975

U.S. Department of Labor. Employment and training report of the President.

Women in the civilian labor force.

1900,1910,1920,1930,1940,1945,1950,1955,1960,1965,1970,1972

Women's Bureau. Economic report of the President.

Women in the civilian labor force.

1973-74

U.S. Department of Labor. Employment and earnings.

EDUCATIONAL ACHIEVEMENT

National Assessment of Educational Progress reading scores by age, sex, race, region of the country, parental education, and type of community.

1971,1975

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Digest of education statistics.

National Assessment of Educational Progress science scores by age, sex, race, region of the country, parental education, and type of community.

1970,1973

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Digest of education statistics.

Differences from national mean scores in learning areas by age and Spanish origin.

Various single years, 1971-75

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Hispanic student achievement in five learning areas, 1971-75.

Weighted national norms of average grade in high school of college freshmen by sex and race.

1966-present

Cooperative Institutional Research Program, American Council on Education and the University of California at Los Angeles. The American freshman: National norms.

Mathematical and verbal Scholastic Aptitude Test (SAT) score averages for college-bound high school seniors by sex.

1952-present

College Entrance Examination Board. College-bound seniors.

Self-reported grades in high school of students taking the SAT by subject and sex.

1971-present

College Entrance Examination Board. College-bound seniors.

Self-reported class rank in high school of students taking the SAT by sex.

1971-present

College Entrance Examination Board. College-bound seniors.

Estimated high school grade point average of students taking the SAT by sex.

1972-present

College Entrance Examination Board. College-bound seniors.

Number of students repeating the academic year in medical schools by ethnic group and class level.

1974-present

American Medical Association. Journal of the American Medical Association, education issues.

Mean scores on MCAT by race, sex, and academic progress of entrants to medical school.

1970

Johnson, D. G., Smith, V. C., Jr., & Tarnoff, S. L. Recruitment and progress of minority medical school entrants 1970-72. Journal of Medical Education, 1975, 50, 713-755.

Mean medical college admission test scores of accepted applicants by sex and section of the test.

1954-present (irregular years)

Association of American Medical Colleges. Datagram.

Percent illiterate in the population by race and nativity.

1870-1940 (decennial),1947,1950,1952,1959,1969

U.S. Department of Commerce, Bureau of the Census. Historical statistics, colonial times to 1970.

Illiteracy by age and race.

1870-1940 (decennial),1947,1952,1959,1969

U.S. Department of Commerce, Bureau of the Census. Current Population Reports, Series P-20, Nos. 20(1947), 45(1952), 99(1959), 217(1969).

EDUCATIONAL ASPIRATIONS

Plans of high school seniors 14-34 years old to attend college or vocational school by sex, race, and type of college.

1967,1972-75

U.S. Department of Commerce, Bureau of the Census. Current Population Reports, Series P-20, Nos. 185(1967), 252(1972), 270(1973), 284(1974), 299(1975).

Educational degree aspirations of students taking the SAT by sex.

1971-present

College Entrance Examination Board. College-bound seniors.

Students' educational degree aspirations by sex and college type and control.

1971

American College Testing Program. Assessing students on the way to college (Vol. 2).

Weighted national norms for freshmen on highest degree planned by race, sex, type of college, and racial composition of college.

1966-present

Cooperative Institutional Research Program, American Council on Education and University of California at Los Angeles. The American freshman: National norms.

Educational plans of college seniors by race.

1972

Baird, L. The graduates: A report on the characteristics and plans of college seniors, 1973, Table 2.2.

EDUCATIONAL ATTAINMENT

Years of school completed by persons 25-34, 35-44, and 45-54 years old by sex and race

1940,1947,1950,1952,1957,1959;1960,1962,1964-present

U.S. Department of Commerce, Bureau of the Census. Current Population Reports, Series P-20, Nos. 6(1947), 77(1952), 121(1962), 138(1964), 158(1965 & 1966), 169(1967), 182(1968), 194(1969), 207(1970), 229(1971), 243(1972), 274(1973 & 1974), 295(1975), 314(1976 & 1977); 1960 census of the population; Education of the American population (1960).

Percent of population 25-34 years old who completed four years of college or more by race.

1967-74

U.S. Department of Commerce, Bureau of the Census. Current Population Reports, Series P-23, Nos. 24(1967), 26(1968), 29(1969), 38(1970), 42(1971), 46(1972), 48(1973), 54(1974).

Educational attainment by race and sex.

Cohorts born 1900 to 1939 in 5-year intervals

U.S. Department of Commerce, Bureau of the Census. U.S. census of population: 1960, Vol. I, Part 1, Table 173; Current Population Reports, Series P-20, No. 158(1966).

EDUCATIONAL RESOURCES AND SCHOOL ENVIRONMENT

Percent of pupils in elementary schools having various school characteristics by race (29 characteristics).

1965

Coleman, J. S. Equality of educational opportunity. Washington, D.C.: U.S. Government Printing Office, 1966.

Percent of pupils in secondary schools having various school characteristics by race (36 characteristics).

1965

Coleman, J. S. Equality of educational opportunity. Washington, D.C.: U.S. Government Printing Office, 1966.

Percent of pupils in elementary and secondary schools having principals with various characteristics by race and level of school (6 characteristics).

1965

Coleman, J. S. Equality of educational opportunity. Washington, D.C.: U.S. Government Printing Office, 1966.

Percent of pupils in elementary and secondary schools having teachers with various characteristics by race and level of school (14 characteristics).

1965

Coleman, J. S. Equality of educational opportunity. Washington, D.C.: U.S. Government Printing Office, 1966.

Percent of fellow pupils with various characteristics by race and level of school (elementary, 13 characteristics; secondary, 20 characteristics).

1965

Coleman, J. S. Equality of educational opportunity. Washington, D.C.: U.S. Government Printing Office, 1966.

Historically black colleges compared with paired historically white colleges (5 characteristics).

Various years for each characteristic: 1965,1966,1967

Bowles, F., & DeCosta, F. A. Between two worlds: A profile of Negro higher education (Report #10024-1). Berkeley, Calif.: Carnegie Commission on Higher Education, 1971.

Capital funds receipts and loans of all institutions of higher education and historically black colleges by source and type of expenditure.

1965

Bowles, F., & DeCosta, F. A. Between two worlds: A profile of Negro higher education (Report #10024-1). Berkeley, Calif.: Carnegie Commission on Higher Education, 1971.

Student financial aid funds disbursed by all institutions of higher education and historically black colleges by type of program, type of aid, and academic level of recipient.

1965

Bowles, F., & DeCosta, F. A. Between two worlds: A profile of Negro higher education (Report #10024-1). Berkeley, Calif.: Carnegie Commission on Higher Education, 1971.

Estimated number of full-time senior teaching and research personnel for all institutions of higher education and historically black colleges by highest degree held and rank.

1966

Bowles, F., & DeCosta, F. A. Between two worlds: A profile of Negro higher education (Report #10024-1). Berkeley, Calif.: Carnegie Commission on Higher Education, 1971.

Per-student financial statistics for a matched sample of historically black colleges and white colleges by control (28 financial statistics).

1965

Bowles, F., & DeCosta, F. A. Between two worlds: A profile of Negro higher education (Report #10024-1). Berkeley, Calif.: Carnegie Commission on Higher Education, 1971.

Mean Roose and Anderson rating of graduate departments by sex and selected fields.

1920-71 (quinquennial)

Solomon, L. C. Women in doctoral education: Clues and puzzles regarding institutional discrimination. Research in Higher Education, 1973, 1, 299-332.

EDUCATION OF PARENTS

Educational attainment by race and sex.

Cohorts born 1900 to 1939 in 5-year intervals

U.S. Department of Commerce, Bureau of the Census. U.S. census of population: 1960, Vol. I, Part 1, Table 173; Current Population Reports, Series P-20, No. 158(1966).

Plans of high school seniors 14-34 years old to attend college by years of school completed by the family head.

1975-76

U.S. Department of Commerce, Bureau of the Census. Current Population Reports, Series P-20, Nos. 284(1974), 299(1975).

Field of study of college students 18-24 years old by sex of student and years of school completed by the family head.

1974

U.S. Department of Commerce, Bureau of the Census. Current Population Reports, Series P-20, No. 289(1974).

EMPLOYMENT AS ADMINISTRATORS

Public elementary school employment by sex, race, and occupation.

1973-present

U.S. Equal Employment Opportunity Commission, unpublished data.

Administrative staff employed by public school systems by sex and type of assignment.

1975-present

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Statistics of public elementary and secondary day schools.

Number of faculty in institutions of higher education by program function, occupational activity, and sex.

1967, 1972

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Number of employees in institutions of higher education.

Women as percentage of academic administrators in four-year colleges and universities.

1969

Oltman, R. M. Campus 1970: Where do women stand? Washington, D.C.: American Association of University Women, 1970.

Sex, race, age, education, and occupation of voting members of college and university governing boards.

1976

American Council on Education, Higher Education Panel. Composition of college and university governing boards.

Policymakers in traditional and minority-related positions by race and minority student population.

1974

Recruitment Leadership and Training Institute. Minorities in policymaking positions in public education.

EMPLOYMENT AS TEACHERS

Highest degree held, median years of experience, salary, and marital status of public school teachers by sex.

1975

National Education Association. Status of the American public school teacher, 1975-76.

Number of teachers in elementary and secondary schools by sex and level of school.

1930-present (biennial)

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Statistics of state school systems.

Number of professional staff other than administrative staff employed by public school systems by type of assignment, sex, state, and outlying area versus large city.

1975-present

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Statistics of public elementary and secondary day schools.

Public school employment by race, sex, and occupation.

1974-75

U.S. Equal Employment Opportunity Commission. Employment opportunity in the schools.

Women as a percentage of full-time faculty members by rank and type of institution.

1972

Carnegie Commission on Higher Education. Making affirmative action work in higher education: An analysis of institutional and federal policies with recommendations. San Francisco: Jossey-Bass, 1975.

Sex, rank, and race of full-time faculty in institutions of higher education.

1975-present (biennial)

U.S. Equal Employment Opportunity Commission, unpublished data.

Full-time instructional faculty by rank, sex, and salary.

1970-72, 1974-present

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Salaries, tenure, and fringe benefits of full-time instructional faculty in institutions of higher education.

Faculty and professional staff by sex.

1918-58 (biennial)

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Biennial survey of education in the United States.

Numbers of full-time, part-time, and full-time-equivalent employees in institutions of higher education by program function, occupational activity, and sex.

1967,1972

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Numbers of employees in institutions of higher education.

Academic-year salaries of faculty members by sex, marital status, prestige of institution, and publications.

1968

Bayer, A. E. College and university faculty: A statistical description. Washington, D.C.: American Council on Education, 1970.

Racial characteristics of faculty members in public and private universities and colleges by type of institution, sex, and age.

1969

Carnegie Commission on Higher Education. Survey of faculty and student opinion.

Women as a percentage of full-time faculty members by rank and type of institution.

1975

National Center for Education Statistics. Women faculty lose a little more ground. Higher Education Daily, February 2, 1976.

ENROLLMENT

Preprimary enrollment of 3-4 year olds by sex, race, and (Spanish origin).

1964-present

U.S. Department of Commerce, Bureau of the Census. Current Population Reports, Series P-20, Nos. 1(1946), 148(1964), 162(1965), 167(1966), 190(1967 & 1968), 206(1969), 222(1970), 236(1971), 257(1972), 261(1973), 286(1974), 303(1975), 319(1976), 321(1977). (Spanish origin added in 1972.)

Preprimary enrollment of 3-4 year olds by race.

1967-76

U.S. Department of Commerce, Bureau of the Census. Current Population Reports, Series P-20, No. 318(1976).

Enrollment in elementary and secondary schools by race and school district.

1968-74, 1976, 1978

U.S. Department of Health, Education, and Welfare, Office for Civil Rights. Elementary and Secondary School Civil Rights Survey.

College or professional school enrollment by age and race.

1946-present

U.S. Department of Commerce, Bureau of the Census. Current Population Reports, Series P-20, Nos. 222(1970), 236(1971), 257(1972), 261(1973), 286(1974), 303(1975), 319(1976), 321(1977).

Enrollment in historically black colleges.

1966-73

Blake, E., Jr. Degrees granted and enrollment trends in historically black colleges: An eight-year study. Washington, D.C.: Institute for Services to Education, 1974.

Enrollment in public postsecondary area vocational schools by sex and race.

1974

U.S. Department of Health, Education, and Welfare, Office of Civil Rights. Survey of public postsecondary area vocational schools.

Sex of students enrolled in noncollegiate postsecondary schools with occupational programs by type of program and type of school.

1971 (tryout),1974,1976,1978

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Enrollments and programs in noncollegiate postsecondary schools.

Percent of high school graduates 20-21 years old who completed at least one year of college by race and sex.

1947-present

U.S. Department of Commerce, Bureau of the Census. Current Population Reports, Series P-20, Nos. 6(1947),..., 207(1970), 229(1971), 243(1972), 274(1973 & 1974), 295(1975), 314(1976 & 1977).

Percent of spring high school graduates who attend college the following fall by race.

1967,1972-75

U.S. Department of Commerce, Bureau of the Census. Current Population Reports, Series P-20, Nos. 185(1967), 252(1972), 270(1973), 284(1974), 299(1975).

High school graduation and college entrance ratios by sex.

1958,1963,1965,1968,1971,1974,1975

U.S. Department of Commerce, Bureau of the Census. Social indicators 1976.

Postsecondary school enrollment of persons 16-34 years old by race and type of school.

1967-74

U.S. Department of Commerce, Bureau of the Census. Current Population Reports, Series P-23, Nos. 24(1967), 26(1968), 29(1969), 38(1970), 42(1971), 46(1972), 48(1973), 54(1974).

Total enrollment in higher education by type of program, sex, and (race).

1963-present

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Opening (fall) enrollment in higher education and Fall enrollment in higher education, supplementary information. (Race for 1976 only.)

Enrollment of first-time freshmen by control and level of institution, sex, enrollment status, and (race).

1963-present

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Opening (fall) enrollment in higher education and Fall enrollment in higher education, supplementary information. (Race for 1976 only.)

Enrollment for advanced degrees in science and engineering by sex.

1959-76

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Enrollment for advanced degrees.

Undergraduate enrollment by race and type of college.

1968-74 (biennial)

U.S. Department of Health, Education, and Welfare, Office for Civil Rights. Racial and ethnic enrollment data from institutions of higher education.

Weighted national norms for first-time, full-time freshmen enrollment by race, sex, and selectivity of university.

1966-present

Cooperative Institutional Research Program, American Council on Education and University of California at Los Angeles. The American freshman: National norms.

Graduate enrollment (except law, dental, and medical) by race.

1968-74 (biennial)

U.S. Department of Health, Education, and Welfare, Office of Civil Rights. Racial and ethnic enrollment data from institutions of higher education.

Bachelor's, master's, doctor's, and first-professional degrees conferred in selected fields by sex and (race).

1961-present

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Earned degrees conferred by institutions of higher education. (Race in 1976 only.)

Total minority enrollment in U.S. medical schools by race.

1969-present

Association of American Medical Colleges. Datagram.

Minority students enrolled in approved law schools by race and year of school.

1969-present

American Bar Association. Law schools and bar admission requirements--A review of legal education in the United States.

Enrollment in American Bar Association-approved law schools by sex.

1963-present

American Bar Association. Review of legal education.

Enrollment by sex, class level, and American Bar Association-approved status of law school.

1948-71

Sikes, B., Carson, C., & Gorai, P. Women lawyers: Supplementary data to the 1971 lawyer statistical report.

First-year enrollment in medical schools by sex and (race).

1929-30,1932-42,1948-present

Association of American Medical Colleges. Annual studies of applicants. (Race added in 1968.)

Enrollment in adult basic and secondary education programs by sex, age, and race.

1972-76

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Adult basic education.

Participants in adult education by age, sex, race, sponsor, and type of program.

1969,1972,1975,1978

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Participation in adult education.

Enrollment in vocational education by race, sex, and status.

1976

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Women in vocational education.

FAMILY INCOME

Household money income by race of household head.

1967-present

U.S. Department of Commerce, Bureau of the Census. Current Population Reports, Series P-60, Nos. 109(1976), 117(1977).

Median income of families by race of household head and (Spanish origin).

1947-present

U.S. Department of Commerce, Bureau of the Census. Current Population Reports, Series P-60, Nos. 80(1970), 85(1971), 90(1972), 97(1973), 105(1975), 116(1977). (Spanish origin added in 1972.)

Percent of primary families with members 18-24 years old enrolled full-time in college by family income.

1967-present

U.S. Department of Commerce, Bureau of the Census. Current Population Reports, Series P-23, Nos. 30(1969), 34(1970), 40(1971), 44(1972), 51(1974), 66(1976).

Plans to attend college of high school seniors 14-34 years old in primary families by family income.

1972,1974-75

U.S. Department of Commerce, Bureau of the Census. Current Population Reports, Series P-20, Nos. 185(1967), 252(1972), 284(1974), 299(1975).

College enrollment of persons 18 years old and over by family income and race.

1976

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Survey of income and education, unpublished data.

College enrollment rates of dependent family members 18-24 years old by family income and sex.

1971-present

U.S. Department of Commerce, Bureau of the Census. Current Population Reports, Series P-20, Nos. 241(1971), 260(1972), 272(1973), 286(1974), 303(1975), 319(1976), 321(1977).

Annual parental income of students taking the SAT by race.

1975-present

College Entrance Examination Board. College-bound seniors.

Estimated parental contribution toward the education of students taking the SAT by race.

1971-74

College Entrance Examination Board. College-bound seniors.

FINANCIAL AID

Weighted national norms for amount and type of support college freshmen anticipate receiving by sex and race.

1966-present

Cooperative Institutional Research Program, American Council on Education and the University of California at Los Angeles. The American freshman: National norms.

Amounts spent and average awards of campus-based student assistance by race.

1973

Bureau of Postsecondary Education, Division of Student Financial Aid.

Type of support received by students during their undergraduate years by sex.

1971

Bayer, A. E. Four years after college entry. ACE Research Reports, Vol. 8, No. 1.

Student financial aid needs by sex and college type and control.

1971

American College Testing Program. Assessing students on the way to college.

Major financial considerations of disadvantaged students by race.

1971

American College Testing Program. Assessing students on the way to college.

Students receiving aid under U.S. Office of Education assistance programs by sex, race, family income, and program.

1976

Atelsek, F. J., & Gomberg, I. L. Estimated number of student aid recipients, 1976-77. Higher Education Panel Reports, Number 36.

Student aid disbursed by all institutions of higher education and by historically Negro colleges by type of program, type of aid, and academic level of recipient.

1965

Bowles, F., & DeCosta, F. A. Between two worlds: A profile of Negro higher education (Report #10024-1). Berkeley, Calif.: Carnegie Commission on Higher Education, 1971.

FLEXIBLE ENROLLMENT POLICIES

Full-time and part-time enrollment in institutions of higher education by sex, type of institution, degree-credit status of student, and (race).

1946-present

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Fall enrollment in higher education. (Race in 1976 only.)

GRADUATION

High school graduates and college enrollment of persons 20-24 years old by sex and race.

1950,1960,1970,1973-present

U.S. Department of Commerce, Bureau of the Census. Statistical abstract of the United States.

High school graduates by sex.

1870-1916,1918-1958 (biennial),1958-present

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Digest of education statistics.

Number of high school graduates compared with population 17 years old by sex.

1901-39 (biennial),1940-54 (biennial),1955-present (biennial)

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. The condition of education.

High school graduation and college entrance ratios by sex.

1958,1963,1965,1968,1971,1974-75

U.S. Department of Commerce, Bureau of the Census. Social indicators 1976.

Public high school graduates by sex and state.

1961-present

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Statistics of public elementary and secondary day schools.

High school graduates by sex and control of institution.

1954-present

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Projections of education statistics.

Degrees, diplomas, and awards based on less than four years of work beyond high school by race.

1970

Brown, F., & Stent, M. D. Minorities in U.S. institutions of higher education. New York: Praeger, 1977.

Degrees and awards conferred based on less than four years of work beyond high school by sex.

1966-present

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Earned degrees conferred.

Associate degrees and other formal awards conferred by curriculum category and division and sex.

1971-76

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Associate degrees and other formal awards below the baccalaureate, 1978.

Bachelor's or first professional degrees conferred per 1,000 persons 23 years old and per 100 high school graduates 4 years earlier by sex.

1942-present

U.S. Department of Commerce, Bureau of the Census. Historical statistics of the United States, colonial times to 1970; Statistical abstracts of the United States.

Master's or second professional degrees conferred per 100 bachelor's degrees 2 years earlier by sex.

1942-present

U.S. Department of Commerce, Bureau of the Census. Historical statistics of the United States, colonial times to 1970; Statistical abstracts of the United States.

Doctor's or equivalent degree conferred per 1,000 bachelor's degrees various numbers of years earlier by sex.

1942-present

U.S. Department of Commerce, Bureau of the Census. Historical statistics of the United States, colonial times to 1970; Statistical abstracts of the United States.

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Bachelor's degrees earned by race.

1968-1974 (biennial)

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Bachelor's degrees awarded in historically black colleges and nationally by field of study.

1966-73

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1870-1970 (decennial)

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Bachelor's, master's, and doctor's degrees awarded by sex, type of school, and area of specialization.

1948-present

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First-professional degrees conferred in dentistry, medicine, and law by sex.

1950-present

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Doctoral degree recipients by sex, field of study, and race.

1973-1976

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1968-74,1976,1978

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1954-66

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1966-present

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1911-1970

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1960-present

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1950-present

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U.S. Department of Labor. Employment and training report of the President.

Consumer Price Indexes by type of household purchase.

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1967-present

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1964,1969,1974

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1971-present

College Entrance Examination Board. College-bound seniors.

Weighted national norms for high school subject matter areas in which college freshmen were very well prepared by sex, race, type of college, and racial composition of college.

1975-present

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College enrollment of the population 14-34 years old by major field of study, sex, and race.

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Percentage of bachelor's degrees awarded by selected fields in historically black colleges and nationally.

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Bachelor's, master's, and doctor's degrees conferred by sex and (race).

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1947-present

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U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Digest of education statistics.

Federal funds for elementary and secondary education by program area (13 program areas).

1960-66 (biennial),1968-present

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U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Statistics of state school systems; Revenues and expenditures for public elementary and secondary education.

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1919,1929,1939-present (biennial)

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1965-present

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1966-76

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1965-present

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Federal appropriations for state-administered programs supported by the Elementary and Secondary Education Act by program (10 programs).

1974-75

U.S. Department of Health, Education, and Welfare, Office of Education, Office Evaluation and Dissemination. State-administered federal education funds.

Expenditures of state-administered programs supported by the Elementary and Secondary Education Act by program and purpose (12 programs).

1975-present

U.S. Department of Health, Education, and Welfare, Office of Education, Office of Evaluation and Dissemination. Uses of state-administered federal education funds.

Total federal funds and total grant awards to state-administered programs supported by the Elementary and Secondary Education Act by program (12 programs).

1976-present

U.S. Department of Health, Education, and Welfare, Office of Education, Office of Evaluation and Dissemination. Uses of state-administered federal education funds.

Federal funds appropriated to states for state-administered programs supported by the Elementary and Secondary Education Act by program and type of recipient agency (12 programs, 6 agency types).

1976-present

U.S. Department of Health, Education, and Welfare, Office of Education, Office of Evaluation and Dissemination. Uses of state-administered federal education funds.

Percentage of school districts receiving federal funds for state-administered programs supported by the Elementary and Secondary Education Act by program (8 programs).

1976-present

U.S. Department of Health, Education, and Welfare, Office of Education, Office of Evaluation and Dissemination. Use of state-administered federal education funds.

Percentages of grants and other federal funds received by states for state-administered programs supported by the Elementary and Secondary Education Act by program and school district size (5 programs, 8 ranges of school size).

1976-present

U.S. Department of Health, Education, and Welfare, Office of Education, Office of Evaluation and Dissemination. Uses of state-administered federal education funds.

Grant funds received by school districts for state-administered programs supported by the Elementary and Secondary Act by program and county income relative to the national average (8 programs).

1976-present

U.S. Department of Health, Education, and Welfare, Office of Education, Office of Evaluation and Dissemination. Uses of state-administered federal education funds.

Percentages of repeating grantees for state-administered programs supported by the Elementary and Secondary Education Act by program (7 programs).

1976-present

U.S. Department of Health, Education, and Welfare, Office of Education, Office of Evaluation and Dissemination. Uses of state-administered federal education funds.

Federal dollars per participant in state-administered programs supported by the Elementary and Secondary Education Act by program (5 programs).

1975-present

U.S. Department of Health, Education, and Welfare, Office of Education, Office of Evaluation and Dissemination. Uses of state-administered federal education funds.

Percentages of federal grants and grant funds appropriated for state-administered programs supported by the Elementary and Secondary Education Act by program and grant size (4 programs, 5 grant sizes).

1976-present

U.S. Department of Health, Education, and Welfare, Office of Education, Office of Evaluation and Dissemination. Uses of state-administered federal education funds.

Funds obligated for elementary and secondary education evaluation contracts within the Office of Education by funding authority (13 funding authorities).

1968-present

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1971

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Federal funds for elementary and secondary education by agency.

1976-present

Office of Management and Budget. Special analyses, budget of the United States.

Federal funds obligated for elementary and secondary educational R&D as a percentage of the total federal R&D appropriation for education.

1969-present

National Science Foundation, Division of Science Resource Studies. An analysis of federal R&D funding by function: Fiscal years 1969-1979.

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1969-present

National Science Foundation, Division of Science Resource Studies. An analysis of federal R&D funding by function: Fiscal years 1969-1979.

National Institute of Education obligations and budget estimates for R&D by program area (5 program areas).

1973-76

U.S. Department of Health, Education, and Welfare, National Institute of Education. The status of educational research and development in the United States: 1975 data book.

Office of Education obligations for R&D by program area (8 program areas).

1974-76

U.S. Department of Health, Education, and Welfare, National Institute of Education. The status of educational research and development in the United States: 1975 data book.

National Institute of Education R&D appropriations for elementary and secondary education.

1977-present

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Federal education division R&D funds for elementary and secondary education by agency and program area (3 agencies, 10 program areas).

1978-present

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Obligations for educational R&D by agencies outside of the Department of Health, Education, and Welfare not included in the NSF and OMB perspectives.

1975

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1965-68

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Federal support for educational R&D by age and grade level of the target groups and by funding agency.

1968

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Office of Education support for educational R&D by special characteristics of the target groups.

1965-68

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Federal support for educational R&D by special characteristics of the target group and by funding agency.

1968

U.S. Department of Health, Education, and Welfare, Office of Education. Educational research and development in the United States.

Office of Education support for educational R&D by geographic area of intended impact.

1965-68

U.S. Department of Health, Education, and Welfare, Office of Education. Educational research and development in the United States.

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1968

U.S. Department of Health, Education, and Welfare, Office of Education. Educational research and development in the United States.

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Institutions conducting educational R&D as reflected by Office of Education awards in 1965 and 1968 and by National Institute of Education awards in 1973 and 1974.

1965,1968,1973-74

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1975

Advisory Commission on Intergovernmental Relations. A catalog of federal grant-in-aid programs to state and local governments: Grants funded FY 1975.

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1949-present

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National Education Association. NEA handbook.

National Education Association spending for lobby activities and administration.

1956-61,1963

Congressional Quarterly Service. Legislators and the lobbyists.

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Foundation support of educational R&D.

1969-72

Council on Foundations. Foundation news.

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Office of Education expenditures for higher education by program area (7 program areas).

1960-72 (biennial),1974-present

U.S. Department of Health, Education, and Welfare, National Center of Education Statistics. Digest of education statistics.

Federal funds for higher education by program area (9 program areas).

1960-66 (biennial),1968-present

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National Science Foundation. Federal funds for research, development, and other scientific activities.

Federal expenditures for higher education by program area (5 program areas).

1929-66,1970-present

U.S. Department of Health, Education, and Welfare, Social Security Administration, Office of Research and Statistics. Social welfare expenditures under public programs in the United States, 1929-66.

Federal funds obligated for R&D in higher education as a percentage of the total federal R&D obligations for education.

1969-present

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National Institute of Education R&D appropriations for higher education.

1977-present

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Federal funds for higher education by agency.

1976-present

Office of Management and Budget. Special analyses, budget of the United States.

Federal expenditures for health services by program area (5 program areas).

1929-66,1970-present

U.S. Department of Health, Education, and Welfare, Social Security Administration, Office of Research and Statistics. Social welfare expenditures under public programs in the United States, 1929-66.

Federal expenditures for social insurance by type of program (7 program types).

1929-66,1970-present

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U.S. Congress, Joint Committee on Printing. Congressional directory.

Confidence of the public in the executive branch of the federal government and in the Congress.

1973-present

National Opinion Research Center. General social survey.

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1939,1943-48,1953-55,1958,1970,1973

Roper Public Opinion Research Center. Survey data for trend analysis.

Ratings of public approval of the performance of the President.

1945-present

Gallup Polling Organization. The Gallup poll of public opinion.

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Funding, duration, and scope of major evaluations of Title I of the Elementary and Secondary Education Act.

1966-77 (irregular)

Rossi, R. J., McLaughling, D. H., Campbell, E. A., and Everett, B. E. Summaries of major Title I evaluations, 1966-1977. Palo Alto, Calif.: American Institutes for Research, 1977.

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Revenue receipts of public elementary and secondary schools from state and local sources.

1919,1929,1939-present (biennial)

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Statistics of state school systems, Revenues and expenditures for public elementary and secondary education.

Foundation support for elementary and secondary education.

1969-72

Council on Foundations. Foundation news.

Summary of expenditures for public schools by major account.

1920-60 (deciennial),1966-present (biennial)

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Digest of education statistics.

Per-pupil expenditures in public elementary and secondary schools.

1930-present (biennial)

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Digest of education statistics.

Number and percentage of public school pupils transported at public expense and current expenditures for transportation.

1930-present (biennial)

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Digest of education statistics.

Pupil-teacher ratios in regular elementary and secondary day schools by institutional control and organizational level.

1958-present

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Projections of education statistics.

Enrollment in regular elementary and secondary day schools by institutional control and organizational level.

1954-present (biennial)

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Projections of education statistics.

Estimated numbers of instructional staff and pupils in nonpublic elementary and secondary schools.

1931-65 (biennial),1968-present

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Statistics of nonpublic elementary and secondary schools.

Preprimary enrollment of children 3-5 years old.

1964-75

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Preprimary enrollment, October 1975. Unpublished data.

High school graduates by sex and by institutional control.

1965-present

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Projections of education statistics.

Instructional staff per 1,000 pupils enrolled in public elementary and secondary schools.

1930-present (biennial)

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Statistics of state school systems.

Number of elementary and secondary schools by control of school.

1930-68 (biennial),1971,1974-present

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Opinions of public secondary school principals on serious problems in the schools.

1977

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SOCIAL FACTORS

Public opinion of major problems with which public schools must deal.

1969-present

Phi Delta Kappa, Inc. Annual Gallup poll of public attitudes toward education.

Public opinion concerning ways of improving the quality of public education by type of school attended by children of respondents.

1976

Phi Delta Kappa, Inc. Annual Gallup poll of public attitudes toward education.

Quality of the public schools: Opinions of parents with public school children.

1974-77

Phi Delta Kappa, Inc. Annual Gallup poll of public attitudes toward education.

Public opinion concerning integrated schools and interdistrict busing by race of respondents.

1977

National Opinion Research Center. General social survey.

Public opinion concerning the adequacy of neighborhood educational services by geographic location.

1975-76

U.S. Department of Commerce, Bureau of the Census. Annual housing survey reports, Series H-150-75F and 76B.

Attitudes of the public toward public schools by the type of schools attended by children of respondents and for respondents who are professional educators.

1973

Phi Delta Kappa, Inc. Annual Gallup poll of public attitudes toward education.

Public attitudes concerning federal aid for the construction of public schools.

1955,1957,1960-61

Roper Public Opinion Research Center. Survey data for trend analysis.

Confidence of the public in persons running educational and other institutions.

1973-present

National Opinion Research Center. General social survey.

Results of public school bond elections.

1958-75

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Bond sales for public school purposes.

Attitudes of white respondents on sending their children to integrated schools with various black/white compositions.

1972,1974,1975,1977

National Opinion Research Center. General social survey.

Number and percentage of black students attending public schools with different racial compositions by geographic locations.

1970-74 (biennial)

U.S. Department of Health, Education, and Welfare, National Institute of Education. Trends in black segregation, 1970-74, Vol. 1, P-76-0353.

Work stoppages by teachers: Number of stoppages, number of teachers involved, and person-days idle during year.

1959-present

U.S. Department of Labor, Bureau of Labor Statistics. Government work stoppages.

General expenditures of state and local governments for education and other services.

1948,1952,1957,1962,1967,1972,1975

U.S. Department of Commerce, Bureau of the Census. 1972 Census of governments, Vol. 6, Topical Studies No. 4; Government finances in 1974-75, Series GF 75, No. 5.

Unemployment rate.

1890-present

U.S. Department of Commerce, Bureau of the Census. Historical statistics of the United States, colonial times to 1970.

Unemployment rate by race and age.

1947-present

U.S. Department of Commerce, Bureau of the Census. Historical statistics of the United States, colonial times to 1970. Updated by Statistical abstract of the United States.

Number of immigrants by country of birth.

1951-60 (total),1961-70 (total),1976-present

U.S. Department of Commerce, Bureau of the Census. Statistical abstract of the United States.

Number of entries of aliens and citizens over international land boundaries.

1950,1955,1960,1965,1970-present

U.S. Department of Commerce, Bureau of the Census. Statistical abstract of the United States.

YOUTH NEEDS

Scholastic Aptitude Test verbal and mathematical score means.

1952-77

College Entrance Examination Board. On further examination: Report of the Advisory Panel on the Scholastic Aptitude Test Score Decline.

Number of Scholastic Aptitude Tests taken.

1952-77

College Entrance Examination Board. On further examination: Report of the Advisory Panel on the Scholastic Aptitude Test Score Decline.

Percentage of high school dropouts among persons 14-34 years old by age, race, and sex

1970,1976

U.S. Department of Commerce, Bureau of the Census. Current Population Reports, Series P-20, Nos. 222(1970), 309(1976).

Estimated retention rates 5th grade through college in public and nonpublic schools.

1925-57 (biennial),1958-68 (biennial)

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Digest of education statistics.

Number of high school graduates compared with population 17 years old by sex.

1901-75 (biennial)

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. The condition of education.

High school graduation rate by sex.

1950-present

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Projections of educational statistics.

Percentage of the population not enrolled in school and not high school graduates by age, sex, race, and (Spanish origin).

1967-75

U.S. Department of Commerce, Bureau of the Census. School enrollment--Social and economic characteristics of students, Current Population Reports, Series P-20, Nos. 190(1967-68), 206(1969), 222(1970), 241(1971), 260(1972), 272(1973), 286(1974), 303(1975), 319(1976). (Spanish origin added in 1973.)

Employment status of population not enrolled in school by age, sex, race, and educational attainment.

1976

U.S. Department of Labor, Bureau of Labor Statistics, Students, graduates, and dropouts in the labor market, October 1976. Special Labor Force Report 200.

Illiteracy rate by age and race.

1947,1952,1959,1969

U.S. Department of Commerce, Bureau of the Census. Historical statistics of the United States, Colonial times to 1970.

Children 17 years old or under by labor force status of mother.

1970-present

U.S. Department of Labor, Bureau of Labor Statistics. Special Labor Force Reports.

Children 5-17 years old in families below the poverty level and poverty rate by state.

1970,1975

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. The condition of education.

Number of children in families below the poverty level by family status and race.

1959-present

U.S. Department of Commerce, Bureau of the Census. Current Population Reports, Series P-60, No. 115(1976).

Youth unemployment rate.

1965,1970-present

U.S. Department of Commerce, Bureau of the Census. Statistical abstract of the United States.

ACCREDITATION STANDARDS

Number of nursing programs accredited by type of program.

1964-present

Yura, H. One decade of accreditation statistics: 1964-74. New York: National League for Nursing, 1975.

Number of nursing programs not accredited by type of program.

1964-present

Yura, H. One decade of accreditation statistics: 1964-74. New York: National League for Nursing, 1975.

Number of nursing programs visited for the purpose of determining accreditation status.

1964-73

Yura, H. One decade of accreditation statistics: 1964-74. New York: National League for Nursing, 1975.

Number of nursing programs approved for initial accreditation by type of program.

1964-present

Yura, H. One decade of accreditation statistics: 1964-74. New York: National League for Nursing, 1975.

Number of nursing programs approved for continued accreditation by type of program.

1964-73

Yura, H. One decade of accreditation statistics: 1964-74. New York: National League for Nursing, 1975.

Number of nursing programs accredited without recommendations for improvements by type of program.

1964-73

Yura, H. One decade of accreditation statistics: 1964-74. New York: National League for Nursing, 1975.

Number of accreditation visitors to nursing programs.

1964-73

Yura, H. One decade of accreditation statistics: 1964-74. New York: National League for Nursing, 1975.

Number of organizations whose members serve on medical accreditation boards.

1977

American Medical Association. Journal of the American Medical Association, education issues.

Significant decisions affecting the accreditation process for nursing education.

1964-74

Yura, H. One decade of accreditation statistics: 1964-74. New York: National League for Nursing, 1975.

AVAILABLE OCCUPATIONS WITHIN THE PROFESSIONS

Number of persons employed in health professions by specialty.

1940-70 (decennial),1971,1973-75

U.S. Department of Health, Education, and Welfare, Health Resources Administration. Report to the President and Congress: On the status of health professions personnel in the United States.

Trends in the numbers of active physicians by specialty.

1970-76

U.S. Department of Health, Education, and Welfare, Health Resources Administration. Report to the President and Congress: On the status of health professions personnel in the United States.

Professionally active physicians by specialty.

1968-74 (biennial),1975-76.

U.S. Department of Health, Education, and Welfare, Public Health Service. Health: United States.

Number of physicians certified by specialty boards.

1974-present

American Medical Association. Journal of the American Medical Association, education issues.

CHARACTERISTICS OF PRACTICING PROFESSIONALS

Distribution of lawyers by city size and education.

1948-present (triennial)

American Bar Foundation. Lawyer statistical report.

Distribution of lawyers in various specialties by age and city size.

1885,1895,1905-1935 (quinquennial)

American Bar Foundation. Lawyer statistical report.

Percentage of females in selected professions (14 professional areas).

1960

U.S. Department of Commerce, Bureau of the Census. Census of population, 1960, Vol. 1, Table 202.

Selected measures of physician performance by age.

1970

American Medical Association. Sixth Periodic Survey of Physicians.

Employment, salary, and educational status of persons holding bachelor's degrees by major field.

1976

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Survey of college graduates.

Occupation, salary, and employment status of persons holding bachelor's degrees by sex.

1976

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Survey of college graduates.

Faculty salaries in higher education by rank, sex, state, and type of institution.

1979

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics.

Percentage of yearly salary increases for full-time higher education instructional staff.

1968-present

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. American Association of University Professors.

CURRICULA

Hours in required courses for law school graduation.

1949,1969,1974

Gee, E. G., & Jackson, D. W. Following the leader: The unexamined consensus in law school curricula. Council on Legal Education for Professional Responsibility.

Specifically required law school courses.

1949,1969,1974

Gee, E. G., & Jackson, D. W. Following the leader: The unexamined consensus in law school curricula. Council on Legal Education for Professional Responsibility.

Number of continuing medical education courses by type of course.

1964-present

American Medical Association. Journal of the American Medical Association, education issues.

Number and percentage of continuing medical education courses by type of physician for whom courses are designed.

1971-present

American Medical Association. Journal of the American Medical Association, education issues.

Number and percentage of continuing medical education courses offered by type of sponsor.

1961-present

American Medical Association. Journal of the American Medical Association, education issues.

Total hours of continuing medical education instruction provided by type of sponsor (6 types of sponsor).

1969-present

American Medical Association. Journal of the American Medical Association, education issues.

DEGREE OF SPECIALIZATION

Certified medical specialties by date of recognition.

1924-1971

American Medical Association. The profile of medical practice.

Trend in number of active physicians by specialty.

1970-76

U.S. Department of Health, Education, and Welfare, Health Resources Administration. A report to the President and Congress: On the status of health professions personnel in the United States.

Number of active physicians by specialty.

1968-74 (biennial),1975-76

U.S. Department of Health, Education, and Welfare, Public Health Service. Health: United States.

DEMAND FOR PROFESSIONALS

New admissions to the bar per 100,000 of the resident population.

1920-40 (biennial),1950-70 (biennial)

National Conference of Bar Examiners. The bar examiner.

Medical personnel per 10,000 of the resident population by specialty and geographic location.

1972-76 (irregular)

U.S. Department of Health, Education, and Welfare, Public Health Service. Health: United States.

Projected employment opportunities and supplies of lawyers, doctors, and nurses.

1976-85 (projected)

U.S. Department of Labor, Bureau of Labor Statistics. Occupational projections and training data.

FACULTY CHARACTERISTICS

Total U.S. medical school graduates who were on U.S. medical school faculties in 1975.

1940-70

Association of American Medical Colleges. Datagram.

Ethnic group members on U.S. medical school faculties.

1972-present

Association of American Medical Colleges. Datagram.

Number of nurses who are full-time instructors in nursing schools by highest credential earned and type of teaching program.

1964-present (biennial)

National League for Nursing. Nursing data book. New York: National League for Nursing, 1978.

Percentage of nurses who are full-time instructors in nursing school by highest credential earned, type of teaching program, and school accreditation status.

1972-present (biennial)

National League for Nursing. Nursing data book. New York: National League for Nursing, 1978.

Number of nurses who are part-time instructors in nursing schools by highest credential earned and type of teaching program.

1966-present (biennial)

National League for Nursing. Nursing data book. New York: National League for Nursing, 1978.

Percentage of nurses who are part-time instructors in nursing schools by highest credential earned, type of teaching program, and school accreditation status.

1972-present (biennial)

National League for Nursing. Nursing data book. New York: National League for Nursing, 1978.

Number and percentage of nursing education administrators by highest credential earned and type of teaching program.

1966-present (biennial)

National League for Nursing. Nursing data book. New York: National League for Nursing, 1978.

Number of medical school faculty with M.D. degree by areas of activity (5 activity areas).

1970-present

Association of American Medical Colleges. Datagram.

Number of medical school faculty with M.D. degree by numbers and major areas of responsibility (5 areas of responsibility).

1970-present

Association of American Medical Colleges. Datagram.

Number of women physicians teaching part- or full-time in medical schools.

1970-present

American Medical Association. Journal of the American Medical Association, education issues.

FINANCIAL AID

Percentages of doctors in various specialties reporting receipt of financial aid while in medical school by funding source.

1950,1954

Lyden, F., Geiger, H., & Peterson, O. The training of good physicians: Critical factors in career choices. Cambridge, Mass.: Harvard University Press, 1968.

Amounts of scholarships and loans administered by medical schools.

1973-present

American Medical Association. Journal of the American Medical Association, education issues.

Average amounts of loans received by medical students by funding source.

1967-present

American Medical Association. Journal of the American Medical Association, education issues.

Average amount of scholarships received by medical students by source of scholarship.

1974-present

American Medical Association. Journal of the American Medical Association, education issues.

Number and total amounts of loans granted by the American Medical Association Education and Research Foundation to students.

1962-present

American Medical Association. Journal of the American Medical Association, education issues.

Number and characteristics of medical students receiving financial aid by source of aid.

1974

Mantovani, R. E. Studies of medical student financing: Medical student finances and personal characteristics. (ERIC No. ED 136 734).

Proportion of medical student income received from public and private institutional sources.

1974

Mantovani, R. E. Studies of medical student financing: Medical student finances and personal characteristics. (ERIC No. ED 136 734).

Number and amounts of physician shortage-area scholarships awarded.

1974-76

U.S. Department of Health, Education, and Welfare, Bureau of Health Manpower. Trends in BHM program statistics, 1978.

Number of students awarded scholarships for health training by specialty.

1967-73

U.S. Department of Health, Education, and Welfare, Bureau of Health Manpower. Trends in BHM program statistics, 1978.

Amounts of student scholarship funds awarded to health institutions by specialty.

1967-73

U.S. Department of Health, Education, and Welfare, Bureau of Health Manpower. Trends in BHM program statistics, 1978.

Number of students receiving loans for health training by specialty.

1965-73

U.S. Department of Health, Education, and Welfare, Bureau of Health Manpower. Trends in BHM program statistics, 1978.

Amounts of student loan and scholarship funds awarded to schools by type of program and training.

1965-73

U.S. Department of Health, Education, and Welfare, Bureau of Health Manpower. Trends in BHM program statistics, 1978.

Amounts of student loan funds awarded to schools for health training versus nursing education.

1965-73

U.S. Department of Health, Education, and Welfare, Bureau of Health Manpower. Trends in BHM program statistics, 1978.

Number of medical students awarded loans and scholarships by type of program and training.

1965-73

U.S. Department of Health, Education, and Welfare, Bureau of Health Manpower. Trends in BHM program statistics, 1978.

Number of graduations from basic RN programs with NLN accreditation by type of program and primary source of student support.

1970-present

National League for Nursing. Nursing data book. New York: National League for Nuring, 1978.

Average national stipends for graduate medical education students.

1968-present

Association of American Medical Colleges. Datagram.

Average stipends for initial year of graduate medical education.

1968-present

Association of American Medical Colleges. Datagram.

Amount of funds awarded to health institutions for student loans, scholarships, and traineeships.

1965-76

U.S. Department of Health, Education, and Welfare, Bureau of Health Manpower. Trends in BHM program statistics, 1978.

Amount of funds awarded to health institutions for student loans, scholarships, and traineeships by specialty.

1965-76

U.S. Department of Health, Education, and Welfare, Bureau of Health Manpower. Trends in BHM program statistics, 1978.

Amount of funds awarded to schools for student loans and scholarships by control of school.

1965-76

U.S. Department of Health, Education, and Welfare, Bureau of Health Manpower. Trends in BHM program statistics, 1978.

Total amounts of American Medical Association Education and Research Foundation unrestricted grants to medical schools.

1959-present

American Medical Association. Journal of the American Medical Association, education issues.

LICENSING REQUIREMENTS

Number of states with licensing requirements for various health-related occupations.

1973

U.S. Department of Health, Education, and Welfare, National Center for Health Statistics. Health resource statistics. Health Law Center. Analysis of state health manpower licensure legislation.

Number of states with licensing requirements for health professionals by type of requirement.

1975

U.S. Department of Health, Education, and Welfare, Health Resources Administration. A report to the President and Congress: On the status of health professions personnel in the United States.

Admission to the bar by state.

1972-present

National Conference of Bar Examiners. The bar examiner.

Percentage of candidates passing the bar examination.

1948-present

American Bar Foundation. Lawyer statistical report.

Number of states with licensing requirements for continuing medical education by date requirement first established.

1977-present

American Medical Association. Journal of the American Medical Association, education issues.

PROFESSIONAL KNOWLEDGE

New books and new editions published in law and medicine.

1950-present

Department of Commerce, U.S. Bureau of the Census. Historical statistics of the United States, colonial times to 1970. (Updated by Statistical abstracts of the United States.)

PROFESSIONAL STANDARDS

National scientific medical society membership.

1971

American Medical Association. Profile of medical practice.

Total voting memberships in organizations of medical interest.

1978-present

American Medical Association. Journal of the American Medical Association, JAMA reference directories.

Number of medical specialty societies with continuing education requirements by date requirement first established.

1977-present

American Medical Association. Journal of the American Medical Association, education issues.

RECRUITMENT, SELECTION, AND RETENTION RATES

Number of applicants to medical schools by sex and (race).

1929-30,1932-42,1948-present

Association of American Medical Colleges. Annual studies of applicants. (Race added in 1968.)

First-year enrollment in medical schools by sex and (race).

1929-30,1932-42,1948-present

Association of American Medical Colleges. Annual studies of applicants. (Race added in 1968.)

Number of applications to medical schools per individual by sex and (race).

1929-30,1932-42,1948-present

Association of American Medical Colleges. Annual studies of applicants. (Race added in 1968.)

Medical school applicants' acceptance ratio by sex and (race).

1929-30,1932-42,1948-present

Association of American Medical Colleges. Annual studies of applicants. (Race added in 1968.)

MCAT scores by examinee's anticipated type of medical career.

1973-present

Association of American Medical Colleges. Datagram.

MCAT scores by level of examinee's parental income.

1973-present

Association of American Medical Colleges. Datagram.

MCAT scores by examinee's precollege geographic location.

1973-present

Association of American Medical Colleges. Datagram.

Numbers of female students and female graduates from medical school.

1914-59 (quinquennial),1960-present

Association of American Medical Colleges. Datagram.

Percentage of medical schools enrolling 10% or more women.

1944-69 (quinquennial),1970-present

Association of American Medical Colleges. Datagram.

Number and percent of medical students admitted who graduated or are still in school by sex.

1960-present

American Medical Association. Journal of the American Medical Association, education issues.

Number of minority applicants and acceptees to medical schools.

1972-present

Association of American Medical Colleges. Datagram.

Mean MCAT scores of accepted, nonaccepted, and total applicants by section of the test.

1972-present

Association of American Medical Colleges. Datagram.

Mean scores on MCAT by race, sex, and academic progress of entrants to medical school.

1970

Johnson, D. G., Smith, V. C., Jr., & Tarnoff, S. L. Recruitment and progress of minority medical school entrants 1970-72. Journal of Medical Education, 1975, 50, 713-755.

Medical school enrollment by year in school.

1930-present

American Medical Association. Journal of the American Medical Association, education issues.

Number of MCAT examinees by sex, undergraduate major, and region of the country.

1950-present

Association of American Medical Colleges. Datagram.

Number of students withdrawing from medical school for academic reasons or for advanced study.

1963-present

American Medical Association. Journal of the American Medical Association, education issues.

Net attrition rate in medical schools by class year.

1960-present

American Medical Association. Journal of the American Medical Association, education issues.

Number of medical school transfers by type of previous school.

1964-present

American Medical Association. Journal of the American Medical Association, education issues.

Number of students who withdrew or were dismissed by reason for withdrawal.

1977

American Medical Association. Journal of the American Medical Association, education issues.

Number of enrollments of nurses in master's programs, percentage of change over previous year, and percentage enrolled full time by the National League for Nursing region.

1958-present

National League for Nursing. Nursing data book. New York: National League for Nursing, 1978.

Percentage of enrollments of nurses in master's programs by functional area of study and by full-time and part-time study.

1968-present

National League for Nursing. Nursing data book. New York: National League for Nursing, 1978.

Number of admissions to basic RN programs and percentage change from previous year by type of program.

1957-present

National League for Nursing. Nursing data book. New York: National League for Nursing, 1978.

Number of admissions to basic RN programs accredited by the National League for Nursing by type of program and primary source of financial support.

1969-present

National League for Nursing. Nursing data book. New York: National League for Nursing, 1978.

Number of graduations from basic RN programs and percentage change from previous years by type of program.

1958-present

National League for Nursing. Nursing data book. New York: National League for Nursing, 1978.

Number of enrollments in basic RN programs and percentage change over previous year by type of program.

1958-present

National League for Nursing. Nursing data book. New York: National League for Nursing, 1978.

Number of enrollments in baccalaureate nursing programs by National League for Nursing accreditation, type of program, and type of speciality.

1970-present

National League for Nursing. Nursing data book. New York: National League for Nursing, 1978.

Number of enrollments and graduations of nurses in doctoral programs and percentage change from previous years by type of department.

1957-present

National League for Nursing. Nursing data book. New York: National League for Nursing, 1978.

Number of enrollments and graduations of nurses in master's programs and percentage change from previous years by National League for Nursing accreditation.

1964-present

National League for Nursing. Nursing data book. New York: National League for Nursing, 1978.

Enrollment in American Bar Association-approved law schools by sex.

1963-present

Association of American Law Schools, Law School Admission Council. Prelaw handbook.

First-year placements in law schools as compared to the numbers of LSAT and (LSDAS completions).

1963-present

Association of American Law Schools, Law School Admission Council. Prelaw handbook. (LSDAS completions since 1972.)

First-year placements in law schools as compared to J.D. or LL.B. degrees awarded three years later.

1963-present

Association of American Law Schools, Law School Admission Council. Prelaw handbook.

Total new admissions to the bar as compared to J.D. or LL.B. degrees awarded.

1963-present

Association of American Law Schools, Law School Admission Council. Prelaw handbook.

Ratio of tests administered to the number of first-year law students.

1958,1960,1967,1970,1973

Poshigian, B. P. The number and earnings of lawyers: Some recent findings. American Bar Foundation Research Journal, 1978, 51(1), 76.

Change in market share of full-time equivalent law students by quality of law school.

1958,1973

Poshigian, B. P. The number and earnings of lawyers: Some recent findings. American Bar Foundation Research Journal, 1978, 51(1), 74.

Total law school enrollment by year in school.

1922-43,1946-present

American Bar Foundation. Compilation of published statistics on law school enrollments and admissions to the bar, 1889-1957 (Research Memorandum Series No. 15). American Bar Association. Review of legal education.

New bar admissions.

1920-1957

American Bar Foundation. Compilation of published statistics on law school enrollments and admissions to the bar, 1889-1957 (Research Memorandum Series No. 15).

Total number of lawyers.

1900-1940 (decennial),1949,1950,1952,1955,1958

American Bar Foundation. Compilation of published statistics on law school enrollments and admissions to the bar, 1889-1957 (Research Memorandum Series No. 15).

Law school enrollment in schools approved and not approved by the American Bar Association.

1928-32,1935-39,1941,1944,1947-present

American Bar Association. Review of legal education.

Total number of law schools.

1928-39,1941,1944,1947-present

American Bar Association. Review of legal education.

First-time enrollment for science/engineering advanced degrees as a percentage of baccalaureates in the same field for the preceding year.

1960,1965,1970

National Science Foundation. Projections of degrees and enrollment in science and engineering fields to 1985. Washington, D.C.: U.S. Government Printing Office.

Science/engineering doctorates as a percentage of the number of first-time enrollees for an advanced degree in the same field seven years earlier.

1963-73

National Science Foundation. Projections of degrees and enrollment in science and engineering fields to 1985. Washington, D.C.: U.S. Government Printing Office.

Bachelor's or first professional degrees conferred by sex per 1,000 persons 23 years old and per 100 high school graduates 4 years earlier.

1942-present

U.S. Department of Commerce, Bureau of the Census. Historical statistics of the United States, colonial times to 1970; Statistical abstracts of the United States.

Master's or second professional degrees conferred by sex per 100 bachelor's degrees 2 years earlier.

1942-present

U.S. Department of Commerce, Bureau of the Census. Historical Statistics of the United States, colonial times to 1970; Statistical abstracts of the United States.

Doctor's or equivalent degrees conferred by sex per 1,000 bachelor's degrees various numbers of years earlier.

1942-present

U.S. Department of Commerce, Bureau of the Census. Historical Statistics of the United States, colonial times to 1970; Statistical abstracts of the United States.

Master's and doctor's degrees awarded by sex.

1870-1970 (decennial)

U.S. Department of Commerce, Bureau of the Census. Historical statistics, colonial times to 1970.

Master's and doctor's degrees awarded by sex, type of school, and area of specialization.

1948-present

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Earned degrees conferred.

First-professional degrees conferred in dentistry, medicine, and law by sex.

1950-present

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. Earned degrees conferred.

Percentages of women among first-professional degree recipients by discipline division and (race).

1961-present

U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. First professional degree awards to women. (Race for 1976 only.)

Percent of recipients of bachelor's degrees who receive doctorate degrees by sex.

1911-1970

Solmon, L. C. Women in doctoral education: Clues and puzzles regarding institutional discrimination. Research in higher education, 1973, 1(4), 305-306.

Doctor's degrees conferred by sex, race, marital status, postdoctoral activities, and field of study.

1973-present

National Academy of Sciences, Commission on Human Resources, National Research Council. Doctorate records file.

Graduate enrollment (except law, dental, and medical) by race.

1968-74 (biennial)

U.S. Department of Health, Education, and Welfare, Office of Civil Rights. Racial and ethnic enrollment data from institutions of higher education.

SCHOOL POLICIES AND PRACTICES

Law school enrollment by American Bar Association accreditation status.

1928-32,1935-39,1941,1944,1947-present

American Bar Association. Review of legal education.

Change in market share of full-time equivalent law students by quality of law school.

1958,1973

Poshigian, B. P. The number and earnings of lawyers: Some recent findings. American Bar Foundation Research Journal, 1978, 51(1), 74.

Number of basic RN programs and percentage of change over previous year by type of program.

1958-77

National League for Nursing. Nursing data book. New York: National League for Nursing, 1978.

Mean salaries of strictly full-time basic science faculty in medical schools by department and rank.

1969-present

Association of American Medical Colleges. Datagram.

Mean salaries of strictly full-time clinical science faculty in medical schools by department and rank.

1969-present

Association of American Medical Colleges. Datagram.

Estimated cost of completed, initiated, and planned facilities construction in medical school projects by intended use of the facility.

1960-present

American Medical Association. Journal of the American Medical Association, education issues.

Amount of funds spent by medical schools for construction (including equipment) of completed facilities.

1960-present

American Medical Association. Journal of the American Medical Association, education issues.

Distribution of medical school expenditures by department.

1976-present

American Medical Association. Journal of the American Medical Association, education issues.

Distribution of medical school expenditures by object and source.

1976-present

American Medical Association. Journal of the American Medical Association, education issues.

Distribution of medical school expenditures by object and function.

1960-present

American Medical Association. Journal of the American Medical Association, education issues.

Expenditures for medical school capital assets.

1976-present

American Medical Association. Journal of the American Medical Association, education issues.

Obligations for medical school capital assets.

1976-present

American Medical Association. Journal of the American Medical Association, education issues.

Medical school expenditures by function (11 functions).

1960-present

American Medical Association. Journal of the American Medical Association, education issues.

Medical school expenditures by functional category (7 categories).

1959-present

Association of American Medical Colleges. Datagram.

Private and public medical school expenditures for basic operating and sponsored activities by source of income.

1960-present

Association of American Medical Colleges. Datagram.

Percentage distribution of medical school expenditures for basic operations and sponsored programs by source of income and control of school.

1960-present

Association of American Medical Colleges. Datagram.

Revenues and expenditures of public and private medical schools.

1967-present

American Medical Association. Journal of the American Medical Association, education issues.

Sponsors of allied health education programs.

1977

American Medical Association. Journal of the American Medical Association, education issues.

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Percentage of full-time and part-time medical school faculties in basic science and clinical science departments.

1967-present

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Full-time and part-time faculty in medical school by specialty.

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Amount of medical school financial support by funding source.

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Medical school expenditures by source of funds.

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Revenues and expenditures of medical schools by purpose.

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Federal obligations to medical schools by purpose.

1950-present

Association of American Medical Colleges. Datagram.

Distributions of revenue restricted to specific programs of medical schools.

1967-present

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Distributions of sponsored and total support in medical schools.

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Distributions of support for general operations in medical schools.

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Number of medical schools by size of total support.

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Number of medical schools by size of sponsored support.

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Number of medical schools by amount of regular support for general operations.

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Federal obligations for biomedical R&D by agency.

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Association of American Medical Colleges. Datagram.

National Institutes of Health appropriations by funding category.

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Association of American Medical Colleges. Datagram.

National Institutes of Health appropriations and obligations.

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Association of American Medical Colleges. Datagram.

National expenditures for medical research by funding source.

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Association of American Medical Colleges. Datagram.

Federal support for medical R&D by agency.

1950-65,1966-present

Association of American Medical Colleges. Datagram.

National Institutes of Health funds obligated by function.

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Association of American Medical Colleges. Datagram.

National Institutes of Health awards to U.S. medical schools by type of award.

1967-present

Association of American Medical Colleges. Datagram.

State appropriations for public and private medical schools.

1972-present

Association of American Medical Colleges. Datagram.

Amounts of construction grants awarded to medical institutions by training area.

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U.S. Department of Health, Education, and Welfare, Bureau of Health Manpower. Trends in BHM program statistics, 1978.

Amounts of construction grants awarded to medical institutions by specialty.

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Amounts of funds awarded to medical institutions by funding strategy.

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Public attitudes toward the American Medical Association.

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Public confidence in medical institutions.

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Mean scores on standardized professional school entrance examinations by type of examination (3 types of examinations).

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Percentage of college seniors entering professional training who rated their abilities in the top one percent of all college seniors by area of training (6 areas).

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Changes in enrollment of junior-year undergraduate students by major.

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Distribution of occupational preferences of college freshmen by sex and race.

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Percentage of new first-year medical students with premedical grade point averages of A, B, or C.

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Statistical profile of persons receiving doctor's degrees by field of study, sex, race, percent with B.A. in same field as doctorate, postdoctoral activities, and marital status.

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Total medical school enrollment by class level, sex, citizenship, and race.

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Association of American Medical Colleges. Datagram.

Percentage distribution of medical students by socioeconomic background and by race.

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Association of American Medical Colleges. Datagram.

Number of female students and graduates of medical schools.

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Association of American Medical Colleges. Datagram.

Number of female applicants and enrollees in medical schools.

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Percentage minority enrollment in medical schools by race and class level.

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Geographical source of entering students in public and private medical schools.

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Number of foreign graduates in U.S. medical school programs by country in which medical education was originally given.

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Number of students admitted to medical schools with advanced standing by type of school and class level.

1968-present

American Medical Association. Journal of the American Medical Association, education issues.

Number of students repeating the academic year in medical schools by ethnic group and class level.

1974-present

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Enrollment for advanced degrees in science and engineering by sex.

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Total enrollment in law schools approved by the American Bar Association by sex.

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